PRELIMINARY

STR-V35

US Model
Canadian Model

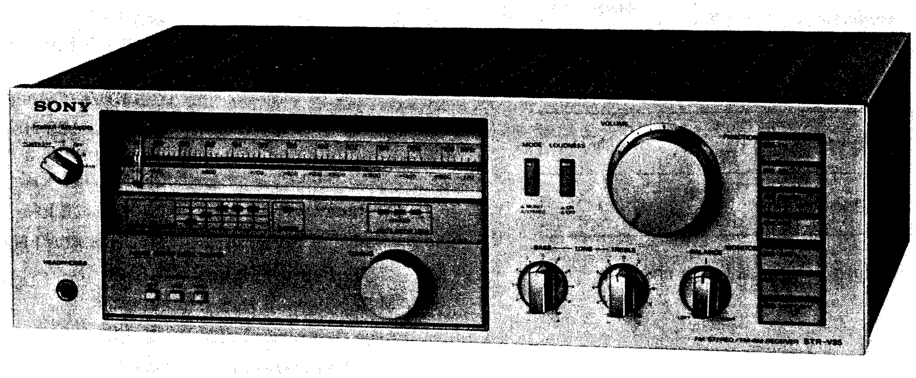


Photo : US model

FM STEREO/FM-AM RECEIVER

SPECIFICATIONS

GENERAL

System:	Superheterodyne FM/AM tuner Equalizer amp section: IC op-amp, NF type Tone amp section: IC op-amp, NF type Power amp section: Pure-complementary dc amp
Power Requirements:	120 V ac, 60 Hz
Power Consumption:	US model; 95 W Canadian model; 150 W
AC Outlets:	Switched 100 W Unswitched 300 W

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY SHADING AND MARK ⚠ ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

ATTENTION AU COMPOSANT AYANT RAPPORT
À LA SÉCURITÉ!

LES COMPOSANTS IDENTIFIÉS PAR UNE TRAME ET UNE MARQUE ⚠ SUR LES DIAGRAMMES SCHÉMATIQUES, LES VUES EXPLOSÉES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR SONY.

Dimensions:	US model; Approx. 430 (w) x 135 (h) x 380 (d) mm 16 $\frac{15}{16}$ (w) x 5 $\frac{3}{16}$ (h) x 14 $\frac{7}{8}$ (d) inches Canadian model; Approx. 460 (w) x 135 (h) x 380 (d) mm 18 (w) x 5 $\frac{3}{16}$ (h) x 14 $\frac{7}{8}$ (d) inches including projecting parts and controls
Weight:	US model; Approx. 8.5 kg, 18 lbs 12 oz (net) Approx. 9.7 kg, 21 lbs 7 oz (in shipping carton) Canadian model; Approx. 9.3 kg, 20 lbs 9 oz (net) Approx. 10.5 kg, 23 lbs 3 oz (in shipping carton)

AMPLIFIER SECTION

Power Output and Total Harmonic Distortion:	With 8 Ω loads, both channels driven, from 20 – 20,000 Hz; rated 35 W per channel minimum RMS power, with no more than 0.04 % total harmonic distortion from 250 mW to rated output.

– Continued on page 2 –

SONY®

SERVICE MANUAL

Damping Factor: 40 at 1 kHz, 8 Ω
Dynamic Headroom: 1.4 dB
Intermodulation (IM) Distortion: Less than 0.04 % at rated output
(60Hz : 7kHz = 4 : 1)
Residual Noise: Less than 0.22 mV at 8 Ω

Inputs:

	Sensitivity	Impedance	S/N	Weighting network
PHONO	2.5 mV (–50 dB)	50 kΩ	79 dB 76 dB*	A
TAPE 1, 2	150 mV (–14.5 dB)	50 kΩ	97 dB 80 dB*	A
AUX	150 mV (–14.5 dB)	50 kΩ	97 dB 80 dB*	A

Measured with rated output power into 8 Ω loads (both channels driven simultaneously) at 1 kHz

* '78 IHF

Outputs (with rated input):

REC OUT 1, 2	Voltage 150 mV (–14.5 dB), Impedance 10 kΩ
HEADPHONES	Accepts low impedance headphones.
SPEAKER A, B	8 – 16 Ω speakers are suitable.

Measured with rated input, FM 30 % modulation

Frequency Response: PHONO: RIAA equalization curve ± 0.5 dB
AUX, TAPE 1, 2: 5 Hz – 70 kHz $^{+0}_{-1}$ dB
Tone Controls: BASS ± 10 dB at 50 Hz
TREBLE ± 10 dB at 20 kHz
Loudness Control: +10 dB at 50 Hz
(att. 30dB) +3 dB at 10 kHz

FM TUNER SECTION

Tuning Range: 87.5 – 108 MHz
Antenna Terminals: 300 Ω balanced
75 Ω unbalanced
Intermediate Frequency: 10.7 MHz
Sensitivity at 50dB Quieting: 16.1 dBf, 3.5 μV (mono)
36.1 dBf, 35 μV (stereo)
Usable Sensitivity: 10.3 dBf, IHF 1.8 μV
Signal-to-noise Ratio: 75 dB (mono)
70 dB (stereo)
Harmonic Distortion: at 100 Hz
0.15 % (mono), 0.2 % (stereo)
at 1 kHz
0.1 % (mono), 0.15 % (stereo)
at 6 kHz
0.15 % (mono), 0.2 % (stereo)
Separation: 40 dB at 100 Hz
45 dB at 1 kHz
35 dB at 10 kHz
Frequency Response: 30 Hz – 15 kHz ± 1 dB
Selectivity: 60 dB at 400 kHz
Capture Ratio: 1.5 dB
AM Suppression Ratio: 50 dB
Image Response Ratio: 45 dB
IF Response Ratio: 90 dB
Spurious Response Ratio: 75 dB
RF Intermodulation: 65 dB
Sub-carrier Product Ratio: 40 dB
Muting Threshold: Approx. 18 μV, 25 dBf (LOW)
Approx. 180 μV, 45 dBf (HIGH)

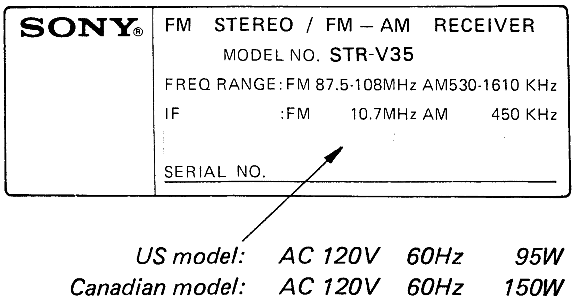
AM TUNER SECTION

Tuning Range: 530 kHz – 1,610 kHz
Antenna: Built-in ferrite-rod antenna,
External antenna terminal
Intermediate: Frequency: 450 kHz
Usable Sensitivity: 300 μV/m, ferrite-rod antenna
100 μV, external antenna
at 1,000 kHz
Signal-to-noise Ratio: 50 dB at 50 mV/m
Harmonic Distortion: 0.5 % at 50 mV/m, 400 Hz
Selectivity: 35 dB at 10 kHz

* * *

MODEL IDENTIFICATION

– Specification Label –



SONY®
FM STEREO / FM – AM RECEIVER
MODEL NO. STR-V35
FREQ RANGE: FM 87.5-108MHz AM530-1610 KHz
IF :FM 10.7MHz AM 450 KHz
SERIAL NO.

US model: AC 120V 60Hz 95W
Canadian model: AC 120V 60Hz 150W

1. ELECTRICAL PARTS LIST

⇒: Due to standardization, interchangeable replacements may be substituted for parts specified in the diagrams.

SEMICONDUCTORS

Transistors

	Ref. No.	*Part No.*	*Description*
⇒	Q101	8-729-663-47	2SC1364
⇒	Q102	8-729-612-77	2SA1027R
⇒ ⇒	Q103, 104 Q201, 202	8-729-663-47	2SC1364
	Q601, 651	8-729-672-51	2SC2725
	Q602, 652	8-729-697-91	2SA979
⇒	Q604, 654	8-729-308-72	2SC1986D-0
	Q605, 655	8-729-691-41	2SC1916A
	Q606, 656	8-729-673-52	2SC1735
	Q607, 657	8-729-685-02	2SA850
⇒	Q608, 658	8-729-377-12	2SA771
⇒	Q609, 659	8-729-663-47	2SC1364
⇒	Q610, 660	8-729-612-77	2SA1027R
	Q611, 661	8-729-204-91	2SA1049
⇒	Q612–616	8-729-663-47	2SC1364
	Q617, 667	8-729-204-91	2SA1049
⇒	Q701	8-729-308-72	2SC1986D-0
	Q702	8-729-634-03	2SK34
⇒	Q703	8-729-663-47	2SC1364
	Q704	8-729-173-12	2SB731
	Q705	8-729-634-03	2SK34
⇒	Q706	8-729-612-77	2SA1027R
	Q707	8-729-180-92	2SD809
	Q801, 802	8-729-671-15	2SC710-15
⇒	Q803–807	8-729-663-47	2SC1364
⇒	Q808–810	8-729-612-77	2SA1027R
	Q811, 812	8-729-663-47	2SC1364

ICs

Ref. No.	*Part No.*	*Description*
IC101	8-759-111-61	μPC1161C
IC201	8-759-111-78	μPC1178C
IC301	8-759-814-16	LB1416
IC401, 451	8-759-652-14	M5214L
IC501	8-759-745-60	NJM4560D
IC801	8-759-111-67	μPC1167C
IC802	8-759-145-58	μPC4558C

Diodes

	Ref. No.	*Part No.*	*Description*
	D101–103	8-719-815-55	1S1555
	D201	8-719-910-73	HZ7A3L
	D202	8-719-815-55	1S1555
	D301, 302	8-719-900-41	SLP141B
	D303–307	8-719-922-41	SLP241B
	D308	8-719-900-41	SLP141B
	D309	8-719-922-41	SLP241B
	D601, 651	8-719-815-55	1S1555
	D602, 652	8-719-300-11	SV04S
	D603, 653 D604	8-719-815-55	1S1555
	D605	⚠8-719-200-02	10E2
	D606, 656	8-719-815-55	1S1555
	D705, 706	⚠8-719-200-02	10E2
⇒	D707	8-719-930-12	EQB01-12Z
⇒	D708	8-719-931-05	EQB01-05
⇒	D709	⚠8-719-504-40	S4VB40
	D801–803	8-719-815-55	1S1555
	D804	8-719-912-00	MV12N
	D805	8-719-815-55	1S1555
	D806	8-719-912-00	MV12N
	D807	8-719-815-55	1S1555

Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

CAPACITORS

Common capacitors are omitted. Refer to the lists on pages 9 and 10 for their part numbers. pF : μμF

C111	1-131-453-00	0.22μF	16V	tantalum
C203	1-161-282-00	18pF	50V	ceramic
C211	1-161-255-00	4.7pF	50V	ceramic
C406, 456	1-130-307-00	0.027μF	100V	polyethylene
C407, 457	1-130-294-00	0.0075μF	100V	polyethylene
C501, 551	1-102-113-00	390pF	50V	ceramic
C615	⚠1-123-181-00	3.3μF	50V	electrolytic
C701, 702	1-125-157-00	6800μF	42V	electrolytic
C707–710	⚠1-108-385-00	0.047μF	100V	mylar
C711	⚠1-102-394-00	(0.01μF	250V) x 2	ceramic

RESISTORS

All resistors are in ohms. Common ¼W carbon resistors are omitted. Refer to the list on page 5 for their part numbers. kΩ : 1000Ω, MΩ : 1000kΩ

All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

R201	1-244-891-00	5.6k	½W	carbon

Note: Les composants identifiés par une trame et une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

Note: Les composants identifiés par une trame et une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

Ref. No.	*Part No.*	*Description*		
R608, 658 R609, 659	⚠1-247-138-00	2k	¼W	carbon (nonflammable)
R613, 663	⚠1-247-114-00	200	¼W	carbon (nonflammable)
R614, 664	⚠1-247-107-00	100	¼W	carbon (nonflammable)
R615, 665	⚠1-247-114-00	200	¼W	carbon (nonflammable)
R617, 667 R618, 668	⚠1-247-083-00	10	¼W	carbon (nonflammable)
R619, 669 R620, 670	⚠1-247-107-00	100	¼W	carbon (nonflammable)
R625, 675 R626, 676	1-217-157-00	0.33	5W	metal plate
R627, 677	1-244-825-00	10	½W	carbon
R639, 689	1-244-817-00	4.7	½W	carbon
R640	⚠1-206-652-00	330	2W	metal oxide (nonflammable)
R703, 707	⚠1-247-192-00	10	½W	carbon (nonflammable)
R710	⚠1-206-527-00	47	3W	metal oxide (nonflammable)
R711	⚠1-247-083-00	10	¼W	carbon (nonflammable)
R712	1-244-855-00	180	½W	carbon
R901	⚠1-202-725-00	3.3M	½W	composition
R902, 952	1-244-865-00	470	½W	carbon
RT101	1-226-235-00	5k, adjustable;		
RT102	1-226-241-00	500k, adjustable;		
RT601, 651	1-226-237-00	20k, adjustable;		
RT602, 652	1-226-233-00	1k, adjustable;		
RT801	1-226-236-00	10k, adjustable;		
RT802	1-226-238-00	50k, adjustable;		
RV501, 551	1-226-265-00	100k/100k-M, variable; BALANCE		
RV502, 552	1-226-723-00	100k/100k, variable; VOLUME		
RV503, 553	1-226-267-00	100k/100k-special, variable; TREBLE		
RV504, 554	1-226-268-00	100k/100k-special, variable; BASS		

MISCELLANEOUS

Ref. No.	*Part No.*	*Description*
CF801, 802	1-527-307-XX	Filter, ceramic
CNJ901 CNJ902	⚠1-561-161-00	Socket, AC OUTLET
CNJ903	1-507-649-00	Jack, HEADPHONES
CP901	⚠1-231-326-11	Encapsulated Component (US model)
CP901	⚠1-231-341-00	Encapsulated Component (Canadian model)
F701	⚠1-532-403-XX	Fuse, 3.15A
FE801	1-463-298-00	Front-end
IFT201	1-404-254-00	AM IFT
IFT202	1-404-189-00	AM IFT
IFT801	1-404-170-00	FM IFT
L201	1-407-169-XX	Microinductor, 100μH
L202, 203	1-407-178-XX	Microinductor, 1μH
L204	1-405-864-00	Coil, AM OSC
♠L601, 651	1-420-838-00	Coil, 1.8μH
L901	1-401-783-00	Antenna, ferrite-rod
LPF101,102	1-231-224-12	Filter, low-pass
PL501–507	1-518-331-81	Lamp, 6V 35mA; FUNCTION, MONITOR
PL901	1-518-405-00	Lamp, 5V 60mA; dial pointer
PT901	⚠1-446-586-00	Transformer, power
RY601	1-553-227-00	Switch, slide; with solenoid
S301	1-553-140-00	Switch, pushbutton; MUTING
S501–507	1-553-137-00	Switch, pushbutton; FUNCTION, MONITOR
S508, 509	1-553-138-00	Switch, pushbutton; MODE, LOUDNESS
S901	⚠1-553-208-00	Switch, rotary; POWER/SPEAKERS
TM1	1-536-616-00	Plate, terminal; ANTENNA
TM901, 902	1-507-637-21	Jack, 6P phono; PHONO, AUX, TAPE 1, 2, REC OUT 1, 2
TM904, 905	1-536-571-00	Plate, terminal; SPEAKER A, B
	⚠1-517-072-00	Holder, fuse
	⚠1-534-986-XX	Cord, power
	♠1-508-799-00	Base Post, U-type
	♠1-535-115-00	Terminal, 2P; with base
	♠1-535-116-00	Terminal, 3P; with base
	♠1-535-118-00	Terminal 5P; with base
	♠1-535-119-00	Terminal, 6P; with base
	♠1-535-139-00	Base Post, 19mm
	♠A-4351-181-A	Complete Circuit Board, tuner
	♠A-4388-208-A	Complete Circuit Board, power amp
	♠1-601-765-00	Printed Circuit Board, display
	♠1-601-766-00	Printed Circuit Board, muting
	♠1-601-767-00	Printed Circuit Board, jack
	♠1-601-768-00	Printed Circuit Board, function
	♠1-601-770-00	Printed Circuit Board, control
	♠1-601-771-00	Printed Circuit Board, volume
	♠1-601-772-00	Printed Circuit Board, speaker switch
	♠1-601-773-00	Printed Circuit Board, headphone

- Items marked "♠" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

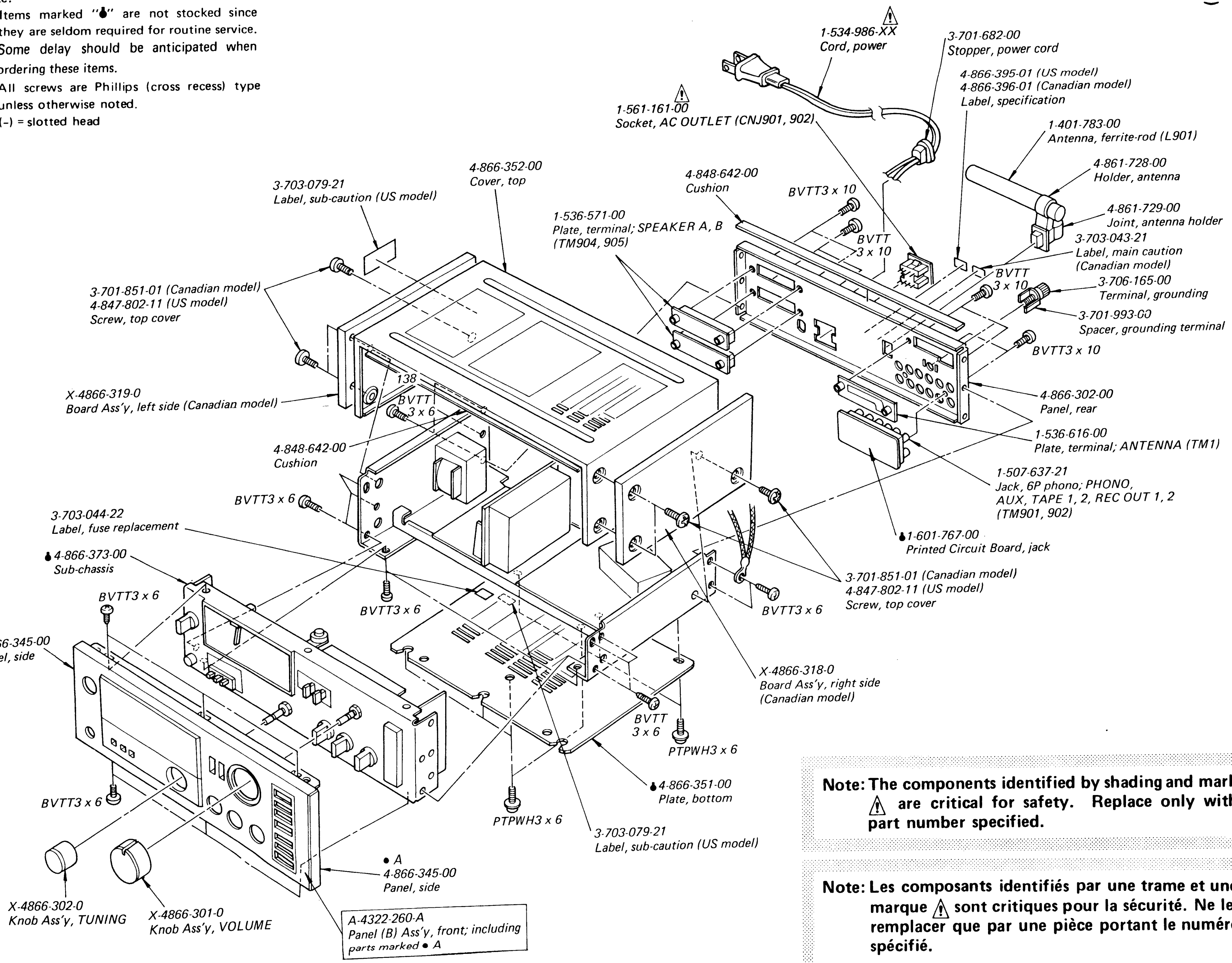
ACCESSORIES AND PACKING MATERIALS

Part No.	*Description*
1-501-161-00	Antenna, feeder
3-701-630-00	Bag, plastic
3-783-077-21	Manual, instruction (US model)
3-783-077-21 3-794-666-31	Manual, instruction (Canadian model)
3-794-233-21	Sheet, consumer products (US model)
4-809-251-00	Bag, plastic; set
4-866-398-00	Cushion, upper
4-866-399-00	Cushion, lower
4-868-703-00	Carton (US model)
4-868-704-00	Carton (Canadian model)

1/4 WATT CARBON RESISTORS

Ω	*Part No.*	Ω	*Part No.*	Ω	*Part No.*	Ω	*Part No.*	Ω	*Part No.*	Ω	*Part No.*	Ω	*Part No.*
1.0	1-246-401-00	10	1-246-425-00	100	1-246-449-00	1.0k	1-246-473-00	10k	1-246-497-00	100k	1-246-521-00	1.0M	1-246-545-00
1.1	1-246-402-00	11	1-246-426-00	110	1-246-450-00	1.1k	1-246-474-00	11k	1-246-498-00	110k	1-246-522-00	1.1M	1-210-814-00
1.2	1-246-403-00	12	1-246-427-00	120	1-246-451-00	1.2k	1-246-475-00	12k	1-246-499-00	120k	1-246-523-00	1.2M	1-210-815-00
1.3	1-246-404-00	13	1-246-428-00	130	1-246-452-00	1.3k	1-246-576-00	13k	1-246-500-00	130k	1-246-524-00	1.3M	1-210-816-00
1.5	1-246-405-00	15	1-246-429-00	150	1-246-453-00	1.5k	1-246-577-00	15k	1-246-501-00	150k	1-246-525-00	1.5M	1-210-817-00
1.6	1-246-406-00	16	1-246-430-00	160	1-246-454-00	1.6k	1-246-578-00	16k	1-246-502-00	160k	1-246-526-00	1.6M	1-210-818-00
1.8	1-246-407-00	18	1-246-431-00	180	1-246-455-00	1.8k	1-246-579-00	18k	1-246-503-00	180k	1-246-527-00	1.8M	1-210-819-00
2.0	1-246-408-00	20	1-246-432-00	200	1-246-456-00	2.0k	1-246-580-00	20k	1-246-504-00	200k	1-246-528-00	2.0M	1-210-820-00
2.2	1-246-409-00	22	1-246-433-00	220	1-246-457-00	2.2k	1-246-581-00	22k	1-246-505-00	220k	1-246-529-00	2.2M	1-210-821-00
2.4	1-246-410-00	24	1-246-434-00	240	1-246-458-00	2.4k	1-246-582-00	24k	1-246-506-00	240k	1-246-530-00	2.4M	1-244-754-00
2.7	1-246-411-00	27	1-246-435-00	270	1-246-459-00	2.7k	1-246-583-00	27k	1-246-507-00	270k	1-246-531-00	2.7M	1-244-755-00
3.0	1-246-412-00	30	1-246-436-00	300	1-246-460-00	3.0k	1-246-584-00	30k	1-246-508-00	300k	1-246-532-00	3.0M	1-244-756-00
3.3	1-246-413-00	33	1-246-437-00	330	1-246-461-00	3.3k	1-246-585-00	33k	1-246-509-00	330k	1-246-533-00	3.3M	1-244-757-00
3.6	1-246-414-00	36	1-246-438-00	360	1-246-462-00	3.6k	1-246-586-00	36k	1-246-510-00	360k	1-246-534-00	3.6M	1-244-758-00
3.9	1-246-415-00	39	1-246-439-00	390	1-246-463-00	3.9k	1-246-587-00	39k	1-246-511-00	390k	1-246-535-00	3.9M	1-244-759-00
4.3	1-246-416-00	43	1-246-440-00	430	1-246-464-00	4.3k	1-246-488-00	43k	1-246-512-00	430k	1-246-536-00	4.3M	1-244-760-00
4.7	1-246-417-00	47	1-246-441-00	470	1-246-465-00	4.7k	1-246-489-00	47k	1-246-513-00	470k	1-246-537-00	4.7M	1-244-761-00
5.1	1-246-418-00	51	1-246-442-00	510	1-246-466-00	5.1k	1-246-490-00	51k	1-246-514-00	510k	1-246-538-00	5.1M	1-244-762-00
5.6	1-246-419-00	56	1-246-443-00	560	1-246-467-00	5.6k	1-246-491-00	56k	1-246-515-00	560k	1-246-539-00		
6.2	1-246-420-00	62	1-246-444-00	620	1-246-468-00	6.2k	1-246-492-00	62k	1-246-516-00	620k	1-246-540-00		
6.8	1-246-421-00	68	1-246-445-00	680	1-246-469-00	6.8k	1-246-493-00	68k	1-246-517-00	680k	1-246-541-00		
7.5	1-246-422-00	75	1-246-446-00	750	1-246-470-00	7.5k	1-246-494-00	75k	1-246-518-00	750k	1-246-542-00		
8.2	1-246-423-00	82	1-246-447-00	820	1-246-471-00	8.2k	1-246-495-00	82k	1-246-519-00	820k	1-246-543-00		
9.1	1-246-424-00	91	1-246-448-00	910	1-246-472-00	9.1k	1-246-496-00	91k	1-246-520-00	910k	1-246-544-00		

Note:
- Items marked "♦" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- All screws are Phillips (cross recess) type unless otherwise noted.
  (-) = slotted head

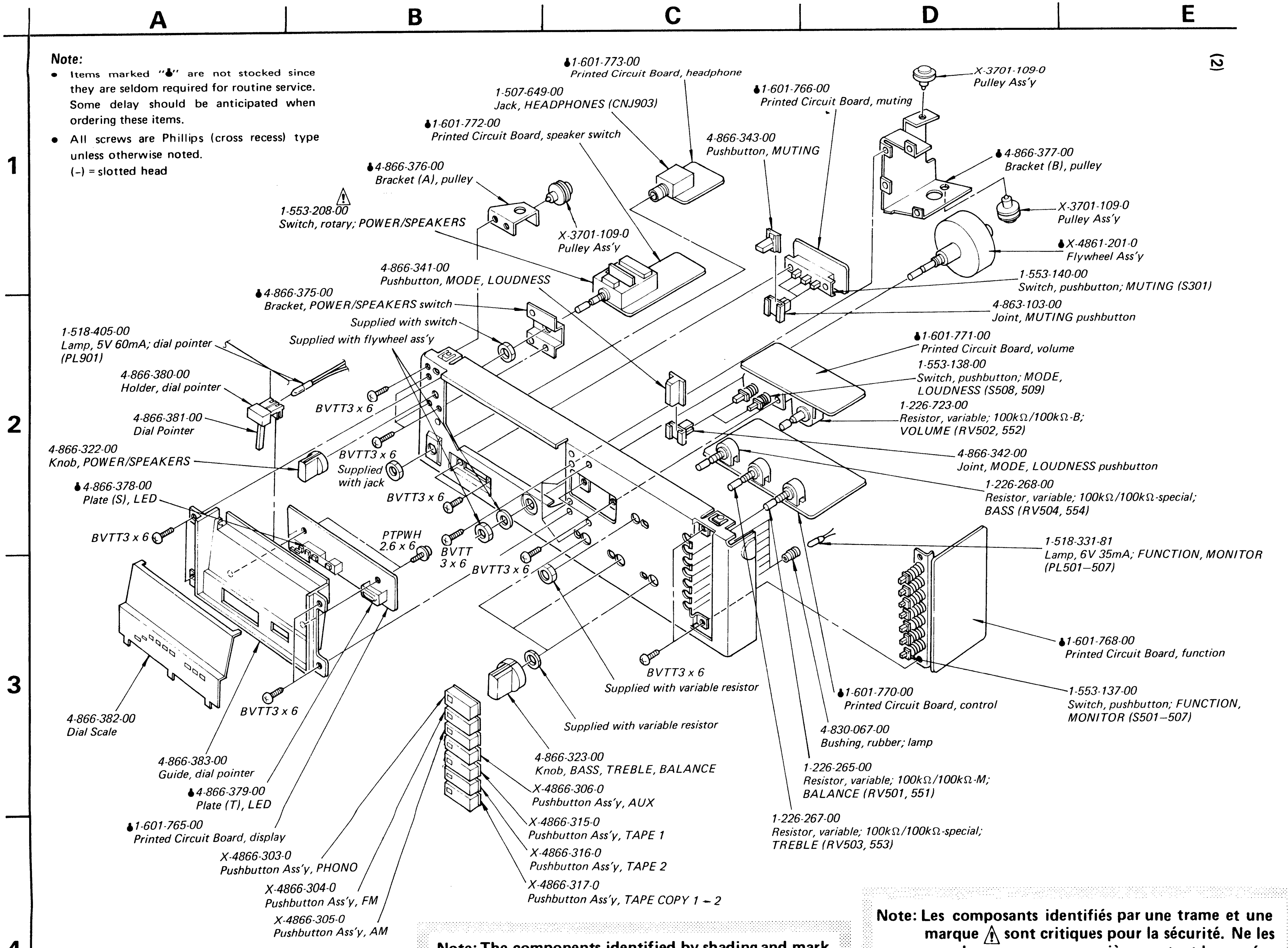

A
B
C
D
E
1
2
3
4
⚠ 1-534-986-XX
Cord, power
3-701-682-00
Stopper, power cord
4-866-395-01 (US model)
4-866-396-01 (Canadian model)
Label, specification
⚠ 1-561-161-00
Socket, AC OUTLET (CNJ901, 902)
1-401-783-00
Antenna, ferrite-rod (L901)
4-861-728-00
Holder, antenna
4-861-729-00
Joint, antenna holder
3-703-043-21
Label, main caution
(Canadian model)
3-706-165-00
Terminal, grounding
3-701-993-00
Spacer, grounding terminal
BVTT3 x 10
4-848-642-00
Cushion
BVTT3 x 10
BVTT
3 x 10
BVTT
3 x 10
4-866-352-00
Cover, top
3-703-079-21
Label, sub-caution (US model)
1-536-571-00
Plate, terminal; SPEAKER A, B
(TM904, 905)
3-701-851-01 (Canadian model)
4-847-802-11 (US model)
Screw, top cover
138
BVTT
3 x 6
X-4866-319-0
Board Ass'y, left side (Canadian model)
4-866-302-00
Panel, rear
1-536-616-00
Plate, terminal; ANTENNA (TM1)
4-848-642-00
Cushion
1-507-637-21
Jack, 6P phono; PHONO,
AUX, TAPE 1, 2, REC OUT 1, 2
(TM901, 902)
BVTT3 x 6
3-703-044-22
Label, fuse replacement
♦1-601-767-00
Printed Circuit Board, jack
♦4-866-373-00
Sub-chassis
3-701-851-01 (Canadian model)
4-847-802-11 (US model)
Screw, top cover
BVTT3 x 6
BVTT3 x 6
BVTT3 x 6
• A
4-866-345-00
Panel, side
X-4866-318-0
Board Ass'y, right side
(Canadian model)
BVTT
3 x 6
PTPWH3 x 6
BVTT3 x 6
♦4-866-351-00
Plate, bottom
PTPWH3 x 6
3-703-079-21
Label, sub-caution (US model)
• A
4-866-345-00
Panel, side
X-4866-302-0
Knob Ass'y, TUNING
X-4866-301-0
Knob Ass'y, VOLUME
A-4322-260-A
Panel (B) Ass'y, front; including
parts marked • A

Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Note: Les composants identifiés par une trame et une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

Note:

- Items marked "♠" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- All screws are Phillips (cross recess) type unless otherwise noted.
  (-) = slotted head

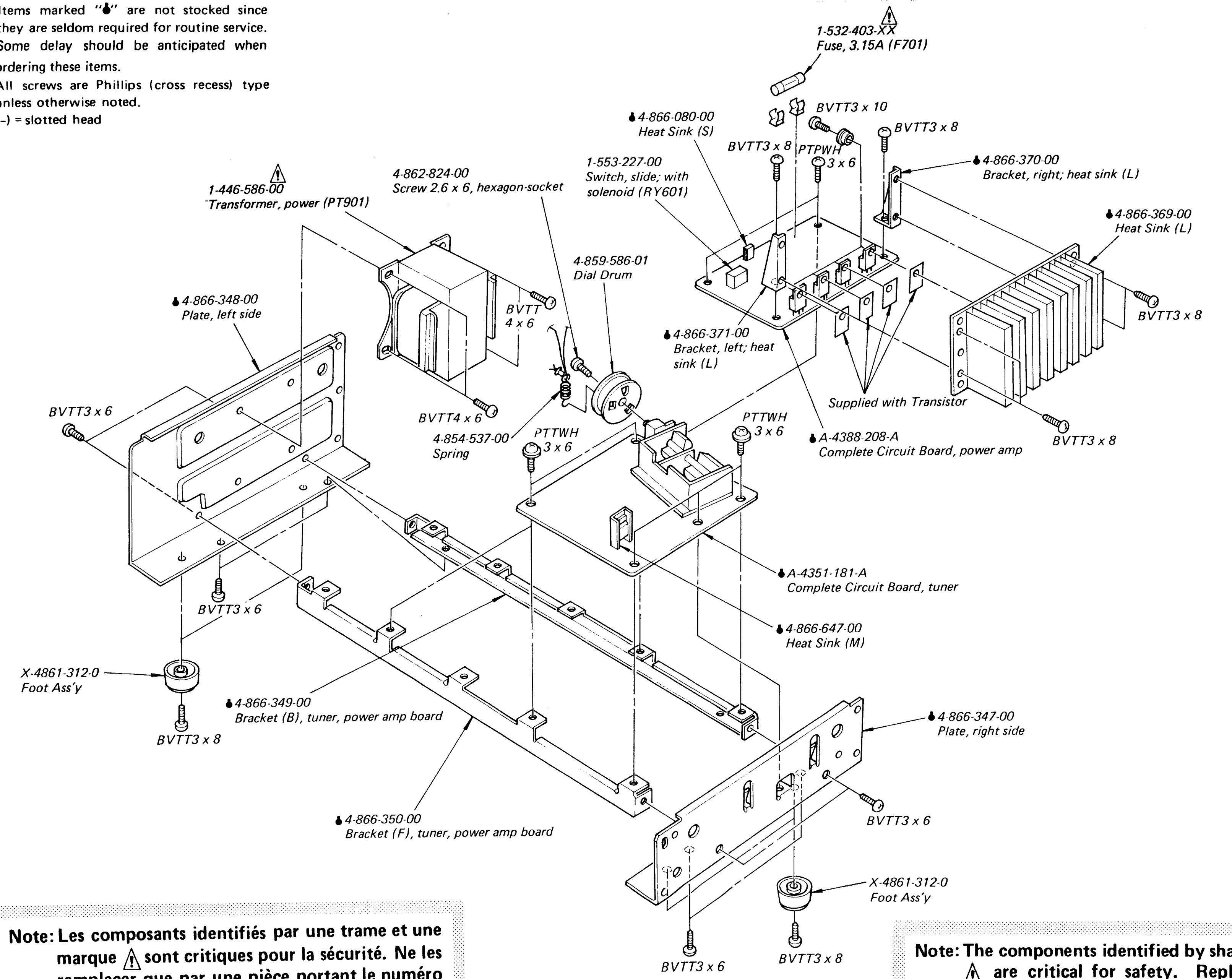

A
B
C
D
E
1
2
3
4
♠1-601-773-00 Printed Circuit Board, headphone
1-507-649-00 Jack, HEADPHONES (CNJ903)
♠1-601-772-00 Printed Circuit Board, speaker switch
♠4-866-376-00 Bracket (A), pulley
1-553-208-00 Switch, rotary; POWER/SPEAKERS
X-3701-109-0 Pulley Ass'y
4-866-341-00 Pushbutton, MODE, LOUDNESS
♠4-866-375-00 Bracket, POWER/SPEAKERS switch
Supplied with switch
Supplied with flywheel ass'y
1-518-405-00 Lamp, 5V 60mA; dial pointer (PL901)
4-866-380-00 Holder, dial pointer
4-866-381-00 Dial Pointer
4-866-322-00 Knob, POWER/SPEAKERS
♠4-866-378-00 Plate (S), LED
BVTT3 x 6
BVTT3 x 6
BVTT3 x 6
Supplied with jack
BVTT3 x 6
BVTT3 x 6
PTPWH 2.6 x 6
BVTT 3 x 6
BVTT3 x 6
BVTT3 x 6
BVTT3 x 6
4-866-382-00 Dial Scale
4-866-383-00 Guide, dial pointer
♠4-866-379-00 Plate (T), LED
♠1-601-765-00 Printed Circuit Board, display
X-4866-303-0 Pushbutton Ass'y, PHONO
X-4866-304-0 Pushbutton Ass'y, FM
X-4866-305-0 Pushbutton Ass'y, AM
4-866-343-00 Pushbutton, MUTING
♠1-601-766-00 Printed Circuit Board, muting
X-3701-109-0 Pulley Ass'y
♠4-866-377-00 Bracket (B), pulley
X-3701-109-0 Pulley Ass'y
♠X-4861-201-0 Flywheel Ass'y
1-553-140-00 Switch, pushbutton; MUTING (S301)
4-863-103-00 Joint, MUTING pushbutton
♠1-601-771-00 Printed Circuit Board, volume
1-553-138-00 Switch, pushbutton; MODE, LOUDNESS (S508, 509)
1-226-723-00 Resistor, variable; 100kΩ/100kΩ-B; VOLUME (RV502, 552)
4-866-342-00 Joint, MODE, LOUDNESS pushbutton
1-226-268-00 Resistor, variable; 100kΩ/100kΩ-special; BASS (RV504, 554)
1-518-331-81 Lamp, 6V 35mA; FUNCTION, MONITOR (PL501–507)
♠1-601-768-00 Printed Circuit Board, function
1-553-137-00 Switch, pushbutton; FUNCTION, MONITOR (S501–507)
♠1-601-770-00 Printed Circuit Board, control
4-830-067-00 Bushing, rubber; lamp
1-226-265-00 Resistor, variable; 100kΩ/100kΩ-M; BALANCE (RV501, 551)
1-226-267-00 Resistor, variable; 100kΩ/100kΩ-special; TREBLE (RV503, 553)
Supplied with variable resistor
Supplied with variable resistor
4-866-323-00 Knob, BASS, TREBLE, BALANCE
X-4866-306-0 Pushbutton Ass'y, AUX
X-4866-315-0 Pushbutton Ass'y, TAPE 1
X-4866-316-0 Pushbutton Ass'y, TAPE 2
X-4866-317-0 Pushbutton Ass'y, TAPE COPY 1 – 2

Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Note: Les composants identifiés par une trame et une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

Note:

- Items marked "♦" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- All screws are Phillips (cross recess) type unless otherwise noted.
  (-) = slotted head


A
B
C
D
E
1
2
3
4
⚠ 1-532-403-XX
Fuse, 3.15A (F701)
BVTT3 x 10
♦ 4-866-080-00
Heat Sink (S)
BVTT3 x 8
BVTT3 x 8
PTPWH 3 x 6
1-553-227-00
Switch, slide; with solenoid (RY601)
♦ 4-866-370-00
Bracket, right; heat sink (L)
⚠ 1-446-586-00
Transformer, power (PT901)
4-862-824-00
Screw 2.6 x 6, hexagon-socket
♦ 4-866-369-00
Heat Sink (L)
4-859-586-01
Dial Drum
♦ 4-866-348-00
Plate, left side
BVTT 4 x 6
BVTT3 x 8
♦ 4-866-371-00
Bracket, left; heat sink (L)
Supplied with Transistor
BVTT3 x 6
BVTT4 x 6
4-854-537-00
Spring
PTTWH 3 x 6
PTTWH 3 x 6
♦ A-4388-208-A
Complete Circuit Board, power amp
BVTT3 x 8
♦ A-4351-181-A
Complete Circuit Board, tuner
BVTT3 x 6
♦ 4-866-647-00
Heat Sink (M)
X-4861-312-0
Foot Ass'y
♦ 4-866-349-00
Bracket (B), tuner, power amp board
♦ 4-866-347-00
Plate, right side
BVTT3 x 8
BVTT3 x 6
♦ 4-866-350-00
Bracket (F), tuner, power amp board
X-4861-312-0
Foot Ass'y
BVTT3 x 6
BVTT3 x 8

Note: Les composants identifiés par une trame et une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

ELECTROLYTIC CAPACITORS

RATING → : Use the high voltage rated one.

CAP. (μF)	6.3 VOLT.	10 VOLT.	16 VOLT.	25 VOLT.	35 VOLT.	50 VOLT.
	PART No.	PART No.	PART No.	PART No.	PART No.	PART No.
0.47					→	1-121-726-00 Ⓐ
1.0					→	1-121-391-00 Ⓐ
2.2					→	1-121-450-00 Ⓐ
3.3	→	→	→	1-121-392-00 Ⓐ	→	1-121-393-00 Ⓐ
4.7	→	→	→	1-121-395-00 Ⓐ	→	1-121-396-00 Ⓐ
10	→	→	1-121-651-00 Ⓐ	1-121-398-00 Ⓐ	→	1-121-738-00 Ⓐ
22	→	→	1-121-479-00 Ⓐ	1-121-480-00 Ⓐ	1-121-662-00 Ⓐ	1-121-152-00 Ⓐ
33	→	→	1-121-403-00 Ⓐ	1-121-404-00 Ⓐ	1-121-652-00 Ⓑ	1-121-405-00 Ⓐ
47	→	1-121-352-00 Ⓐ	1-121-409-00 Ⓐ	1-121-410-00 Ⓐ	1-121-653-00 Ⓑ	1-121-411-00 Ⓐ
100	→	1-121-414-00 Ⓐ	1-121-415-00 Ⓐ	1-121-416-00 Ⓐ	1-121-357-00 Ⓑ	1-121-417-00 Ⓑ
220	1-121-419-00 Ⓑ	1-121-420-00 Ⓑ	1-121-421-00 Ⓐ	1-121-422-00 Ⓑ	1-121-261-00 Ⓒ	1-121-423-00 Ⓑ
330	1-121-751-00 Ⓑ	1-121-805-00 Ⓑ	1-121-521-00 Ⓒ	1-121-654-00 Ⓑ	1-121-655-00 Ⓓ	1-121-656-00 Ⓒ
470	1-121-424-00 Ⓑ	1-121-425-00 Ⓒ	1-121-426-00 Ⓒ	1-121-733-00 Ⓑ	1-121-361-00 Ⓔ	1-121-810-00 Ⓓ
1000	–	1-121-736-00 Ⓒ	1-121-245-00 Ⓓ	1-121-657-00 Ⓓ	1-121-388-00 Ⓔ	1-123-061-00 Ⓕ
2200	1-121-658-00 Ⓑ	1-121-659-00 Ⓒ	1-121-660-00 Ⓓ	1-123-067-00 Ⓕ	1-121-984-00 Ⓕ	–
3300	1-121-661-00 Ⓓ	1-123-075-00 Ⓔ	1-123-071-00 Ⓕ	–	–	–

CAP. (μF)	100 VOLT.	160 VOLT.	250 VOLT.	350 VOLT.
	PART No.	PART No.	PART No.	PART No.
0.47	–	–	–	–
1.0	1-123-249-00 Ⓐ	1-123-252-00 Ⓐ	1-123-003-00 Ⓑ	1-121-168-00 Ⓑ
2.2	1-123-250-00 Ⓐ	1-123-026-00 Ⓑ	–	1-123-028-00 Ⓑ
3.3	1-121-995-00 Ⓐ	–	1-123-004-00 Ⓑ	1-123-006-00 Ⓒ
4.7	1-123-255-00 Ⓐ	1-121-246-00 Ⓑ	1-121-759-00 Ⓑ	1-123-007-00 Ⓓ
10	1-121-126-00 Ⓑ	1-121-999-00 Ⓑ	1-123-254-00 Ⓒ	1-123-008-00 Ⓓ
22	1-121-996-00 Ⓒ	1-123-253-00 Ⓒ	1-123-005-00 Ⓓ	1-123-022-00 Ⓓ
33	1-121-997-00 Ⓒ	1-121-757-00 Ⓒ	–	–
47	1-123-251-00 Ⓒ	1-121-919-00 Ⓒ	–	–
100	1-123-084-00 Ⓔ	–	–	–

CERAMIC CAPACITORS

RATING

CAP. (pF)	50 VOLT.	CAP. (pF)	50 VOLT.	CAP. (pF)	50 VOLT.	CAP. (μF)	50 VOLT.
	PART No.		PART No.		PART No.		PART No.
0.5	1-101-837-00	22	1-102-959-00	150	1-101-361-00	0.001	1-102-074-00
0.75	1-101-586-00	24	1-102-960-00	160	1-101-367-00	0.0012	1-102-118-00
1.0	1-102-934-00	27	1-102-961-00	180	1-102-976-00	0.0015	1-102-119-00
1.5	1-101-576-00	30	1-102-962-00	200	1-102-977-00	0.0018	1-102-120-00
2.0	1-102-935-00	33	1-102-963-00	220	1-102-978-00	0.0022	1-102-121-00
3	1-102-936-00	36	1-102-964-00	240	1-102-979-00	0.0027	1-102-122-00
4	1-102-937-00	39	1-102-965-00	270	1-102-980-00	0.0033	1-102-123-00
5	1-102-942-00	43	1-102-966-00	300	1-102-981-00	0.0039	1-102-124-00
6	1-102-943-00	47	1-101-880-00	330	1-102-820-00	0.0047	1-102-125-00
7	1-102-944-00	51	1-101-882-00	360	1-102-821-00	0.0056	1-102-126-00
8	1-102-945-00	56	1-101-884-00	390	1-102-822-00	0.0068	1-102-127-00
9	1-102-946-00	62	1-101-886-00	430	1-102-823-00	0.0082	1-102-128-00
10	1-102-947-00	68	1-101-888-00	470	1-102-824-00	0.01	1-102-129-00
11	1-102-948-00	75	1-101-890-00	510	1-101-059-00	0.022	1-101-005-00
12	1-102-949-00	82	1-102-971-00	560	1-102-115-00	0.047	1-101-006-00
13	1-102-950-00	91	1-102-972-00	680	1-102-116-00		
15	1-102-951-00	100	1-102-973-00	820	1-102-117-00		
16	1-102-952-00	110	1-102-815-00				
18	1-102-953-00	120	1-102-816-00				
20	1-102-958-00	130	1-101-081-00				

0.001μF = 1,000pF

CERAMIC (SEMICONDUCTOR) CAPACITORS

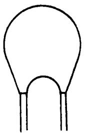
RATING → : Use the high voltage rated one.

CAP. (μF)	25 VOLT.	50 VOLT.	CAP. (μF)	25 VOLT.	50 VOLT.
	PART No.	PART No.		PART No.	PART No.
0.001	→	1-161-039-00	0.018	1-161-016-00	1-161-054-00
0.0012	→	1-161-040-00	0.022	1-161-017-00	1-161-055-00
0.0015		1-161-041-00	0.027	1-161-018-00	1-161-056-00
0.0018		1-161-042-00	0.033	1-161-019-00	1-161-057-00
0.0022		1-161-043-00	0.039	1-161-010-00	1-161-058-00
0.0027	→	1-161-044-00	0.047	1-161-021-00	1-161-059-00
0.0033	→	1-161-045-00	0.056	→	1-161-060-00
0.0039	→	1-161-046-00	0.068	→	1-161-061-00
0.0047	→	1-161-047-00	0.082	1-161-024-00	1-161-062-00
0.0056	→	1-161-048-00	0.1	1-161-025-00	1-161-063-00
0.0068	→	1-161-049-00			
0.0082	1-161-012-00	1-161-050-00			
0.01	1-161-013-00	1-161-051-00			
0.012	→	1-161-052-00			
0.015	1-161-015-00	1-161-053-00			

MYLAR CAPACITORS

	RATING										
CAP. (µF)	50 VOLT.	100 VOLT.	200 VOLT.	CAP. (µF)	50 VOLT.	100 VOLT.	200 VOLT.	CAP. (µF)	50 VOLT.	100 VOLT.	200 VOLT.
	PART No.	PART No.	PART No.		PART No.	PART No.	PART No.		PART No.	PART No.	PART No.
0.001	1-108-227-00	1-108-365-00	1-108-409-00	0.01	1-108-239-00	1-108-377-00	1-108-421-00	0.1	1-108-251-00	1-108-389-00	1-108-433-00
0.0012	1-108-351-00	1-108-366-00	1-108-410-00	0.012	1-108-357-00	1-108-378-00	1-108-422-00	0.12	1-108-363-00	1-108-390-00	1-108-434-00
0.0015	1-108-228-00	1-108-367-00	1-108-411-00	0.015	1-108-240-00	1-108-379-00	1-108-423-00	0.15	1-108-252-00	1-108-391-00	1-108-435-00
0.0018	1-108-352-00	1-108-368-00	1-108-412-00	0.018	1-108-358-00	1-108-380-00	1-108-424-00	0.18	1-108-364-00	1-108-392-00	1-108-436-00
0.0022	1-108-230-00	1-108-369-00	1-108-413-00	0.022	1-108-242-00	1-108-381-00	1-108-425-00	0.22	1-108-254-00	1-108-393-00	1-108-437-00
0.0027	1-108-353-00	1-108-370-00	1-108-414-00	0.027	1-108-359-00	1-108-382-00	1-108-426-00	0.27	1-108-854-00	–	–
0.0033	1-108-232-00	1-108-371-00	1-108-415-00	0.033	1-108-244-00	1-108-383-00	1-108-427-00	0.33	1-108-855-00	–	–
0.0039	1-108-354-00	1-108-372-00	1-108-416-00	0.039	1-108-360-00	1-108-384-00	1-108-428-00	0.39	1-108-856-00	–	–
0.0047	1-108-234-00	1-108-373-00	1-108-417-00	0.047	1-108-246-00	1-108-385-00	1-108-429-00	0.47	1-108-857-00	–	–
0.0056	1-108-355-00	1-108-374-00	1-108-418-00	0.056	1-108-361-00	1-108-386-00	1-108-430-00				
0.0068	1-108-237-00	1-108-375-00	1-108-419-00	0.068	1-108-249-00	1-108-387-00	1-108-431-00				
0.0082	1-108-356-00	1-108-376-00	1-108-420-00	0.082	1-108-362-00	1-108-388-00	1-108-432-00				

TANTALUM CAPACITORS



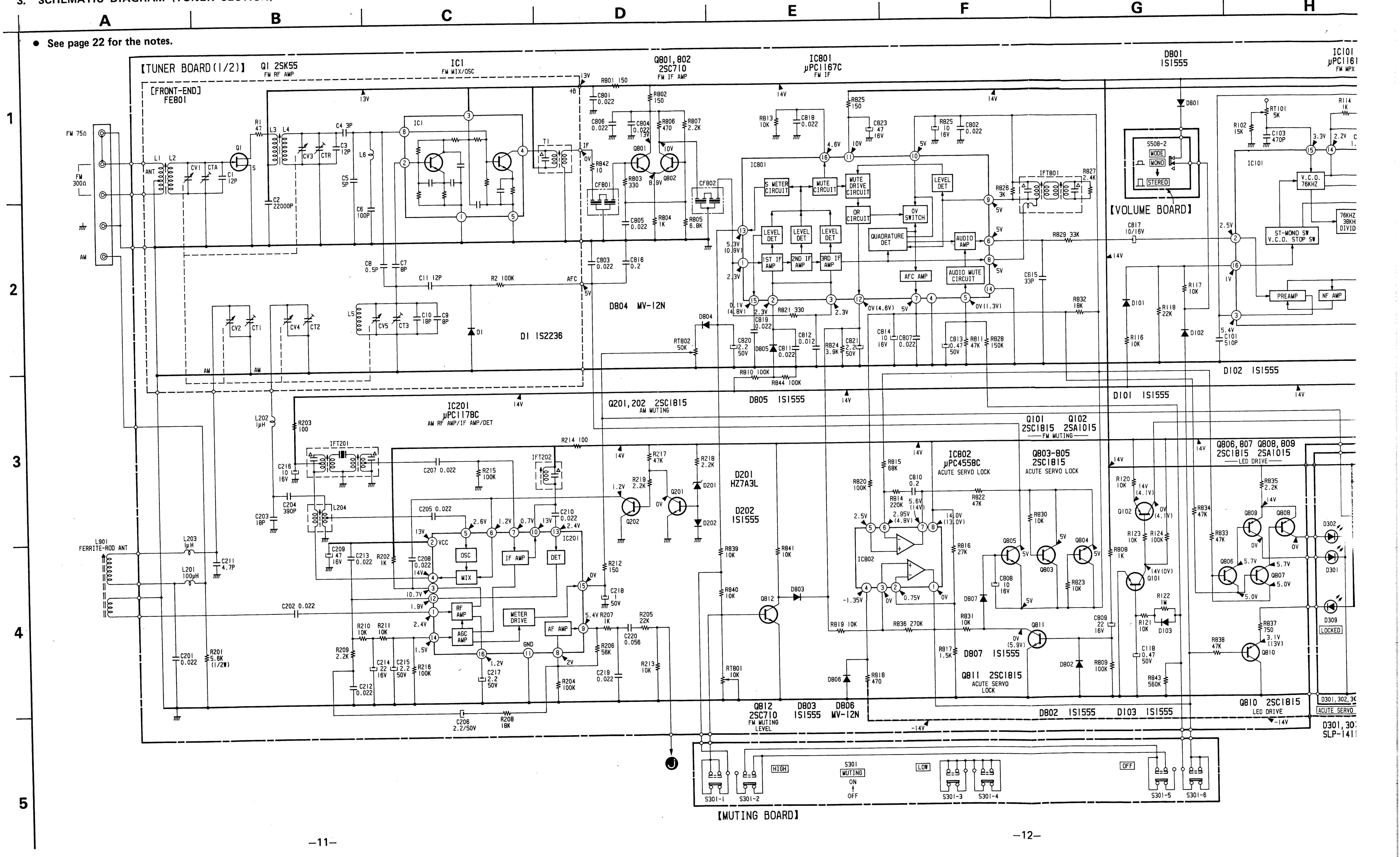
	RATING			→ : Use the high voltage rated one.			
CAP. (µF)	3.15 VOLT.	6.3 VOLT.	10 VOLT.	16 VOLT.	20 VOLT.	25 VOLT.	35 VOLT.
	PART No.	PART No.	PART No.	PART No.	PART No.	PART No.	PART No.
0.01					→	→	1-131-396-00 Ⓑ
0.015						→	1-131-397-00 Ⓑ
0.022						→	1-131-398-00 Ⓑ
0.033						→	1-131-399-00 Ⓑ
0.047						→	1-131-400-00 Ⓑ
0.068					→	→	1-131-401-00 Ⓑ
0.1					→	→	1-131-402-00 Ⓑ
0.15					→	→	1-131-403-00 Ⓑ
0.22					→	→	1-131-404-00 Ⓑ
0.33					→	1-131-409-00 Ⓑ	1-131-405-00 Ⓑ
0.47	–	–	–	–	1-131-412-00 Ⓑ	→	1-131-406-00 Ⓑ
0.68	–	–	–	1-131-415-00 Ⓑ	→	1-131-410-00 Ⓑ	1-131-407-00 Ⓑ
1.0	–	–	1-131-418-00 Ⓑ	–	1-131-413-00 Ⓑ	→	1-131-408-00 Ⓑ
1.5	–	1-131-421-00 Ⓑ	–	1-131-416-00 Ⓑ	→	1-131-411-00 Ⓑ	1-131-348-00 Ⓑ
2.2	1-131-424-00 Ⓑ	–	1-131-419-00 Ⓑ	–	1-131-414-00 Ⓑ	1-131-355-00 Ⓑ	1-131-349-00 Ⓑ
3.3	–	1-131-422-00 Ⓑ	–	1-131-417-00 Ⓑ	1-131-362-00 Ⓑ	1-131-356-00 Ⓑ	1-131-350-00 Ⓑ
4.7	1-131-425-00 Ⓑ	–	1-131-420-00 Ⓑ	1-131-369-00 Ⓑ	1-131-363-00 Ⓑ	1-131-357-00 Ⓑ	1-131-351-00 Ⓒ
6.8	–	1-131-423-00 Ⓑ	1-131-376-00 Ⓑ	1-131-370-00 Ⓑ	1-131-364-00 Ⓑ	1-131-358-00 Ⓒ	1-131-352-00 Ⓒ
10	1-131-426-00 Ⓑ	1-131-383-00 Ⓑ	1-131-377-00 Ⓑ	1-131-371-00 Ⓑ	1-131-365-00 Ⓒ	1-131-359-00 Ⓒ	1-131-353-00 Ⓓ
15	1-131-390-00 Ⓑ	1-131-384-00 Ⓑ	1-131-378-00 Ⓑ	1-131-372-00 Ⓑ	1-131-366-00 Ⓒ	1-131-360-00 Ⓓ	–
22	1-131-391-00 Ⓑ	1-131-385-00 Ⓑ	1-131-379-00 Ⓒ	1-131-373-00 Ⓒ	1-131-367-00 Ⓓ		
33	1-131-392-00 Ⓑ	1-131-386-00 Ⓒ	1-131-380-00 Ⓒ	1-131-374-00 Ⓓ			
47	1-131-393-00 Ⓒ	1-131-387-00 Ⓒ	1-131-381-00 Ⓓ	–			
68	1-131-394-00 Ⓑ	1-131-388-00 Ⓒ	–	–			
100	1-131-395-00 Ⓓ	–	–	–			

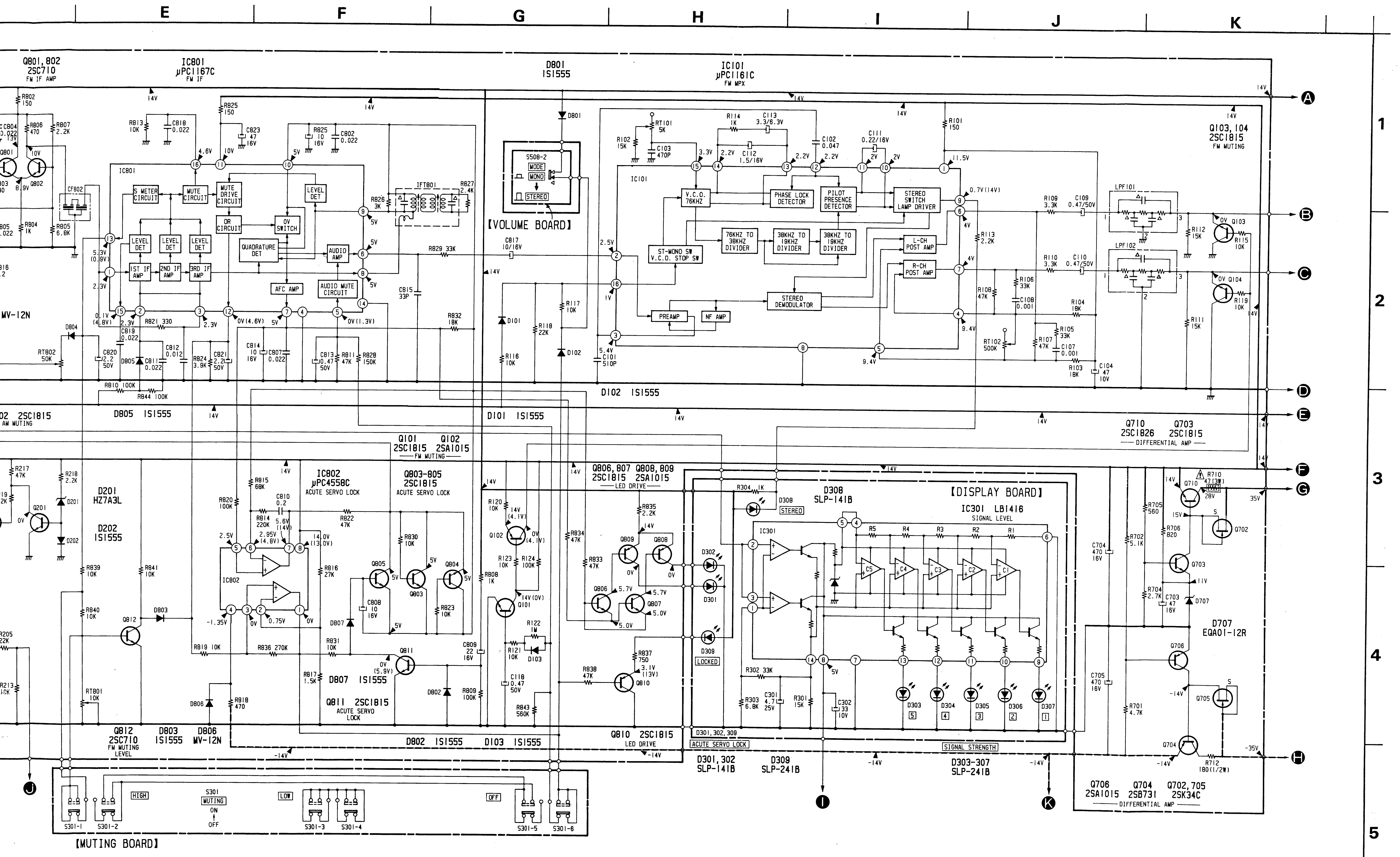
TANTALUM CAPACITORS

	RATING					
CAP. (µF)	3 VOLT.	6.3 VOLT.	10 VOLT.	16 VOLT.	20 VOLT.	35 VOLT.
	PART No.	PART No.	PART No.	PART No.	PART No.	PART No.
0.033						1-131-273-00 Ⓔ
0.047						1-131-274-00 Ⓔ
0.068						1-131-275-00 Ⓔ
0.1						1-131-276-00 Ⓓ
0.15						1-131-277-00 Ⓓ
0.22			–	–	1-131-262-00 Ⓓ	1-131-278-00 Ⓓ
0.33			–	–	1-131-263-00 Ⓓ	1-131-279-00 Ⓓ
0.47			1-131-169-00 Ⓓ	–	1-131-264-00 Ⓓ	1-131-280-00 Ⓓ
0.68			–	1-131-258-00 Ⓓ	1-131-265-00 Ⓓ	1-131-281-00 Ⓓ
1.0			1-131-254-00 Ⓓ	–	1-131-266-00 Ⓓ	1-131-282-00 Ⓓ
1.5		1-131-250-00 Ⓓ	–	–	1-131-267-00 Ⓓ	1-131-283-00 Ⓔ
2.2		–	–	1-131-259-00 Ⓓ	1-131-268-00 Ⓓ	1-131-284-00 Ⓔ
3.3		–	1-131-255-00 Ⓓ	–	1-131-269-00 Ⓓ	–
4.7		1-131-251-00 Ⓔ	1-131-171-00 Ⓓ	–	1-131-270-00 Ⓓ	–
6.8		–	–	1-131-260-00 Ⓓ	1-131-271-00 Ⓔ	–
10	–	–	1-131-256-00 Ⓓ	–	1-131-272-00 Ⓔ	–
15	–	1-131-252-00 Ⓓ	–	1-131-261-00 Ⓔ		
22	–	–	1-131-257-00 Ⓔ	–		
33	1-131-176-00 Ⓓ	1-131-253-00 Ⓔ	1-131-173-00 Ⓒ	–		
47	1-131-288-00 Ⓕ	1-131-174-00 Ⓓ	–	–		
100	1-131-177-00 Ⓓ					

3. SCHEMATIC DIAGRAM (TUNER SECTION)

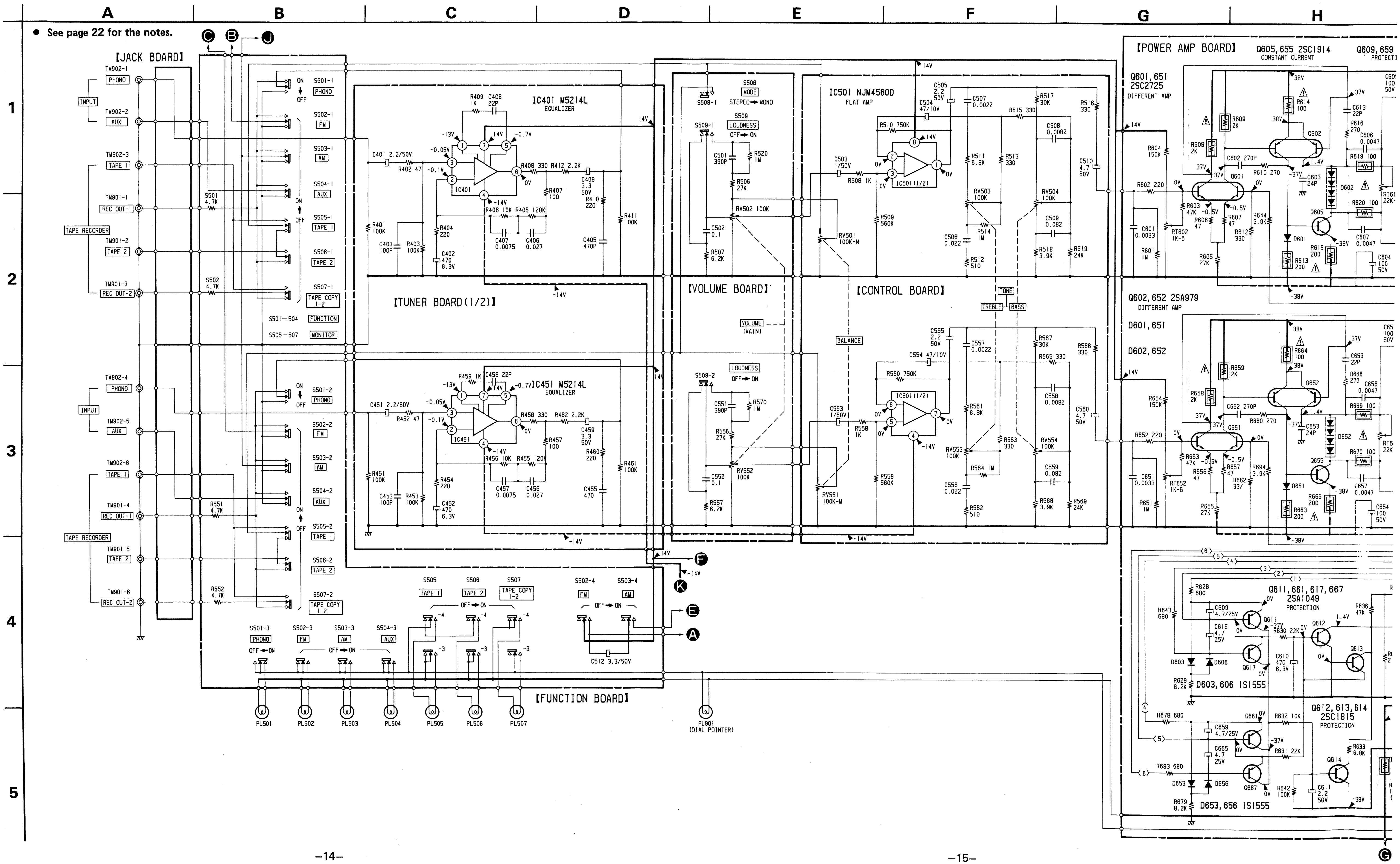
- See page 22 for the notes.

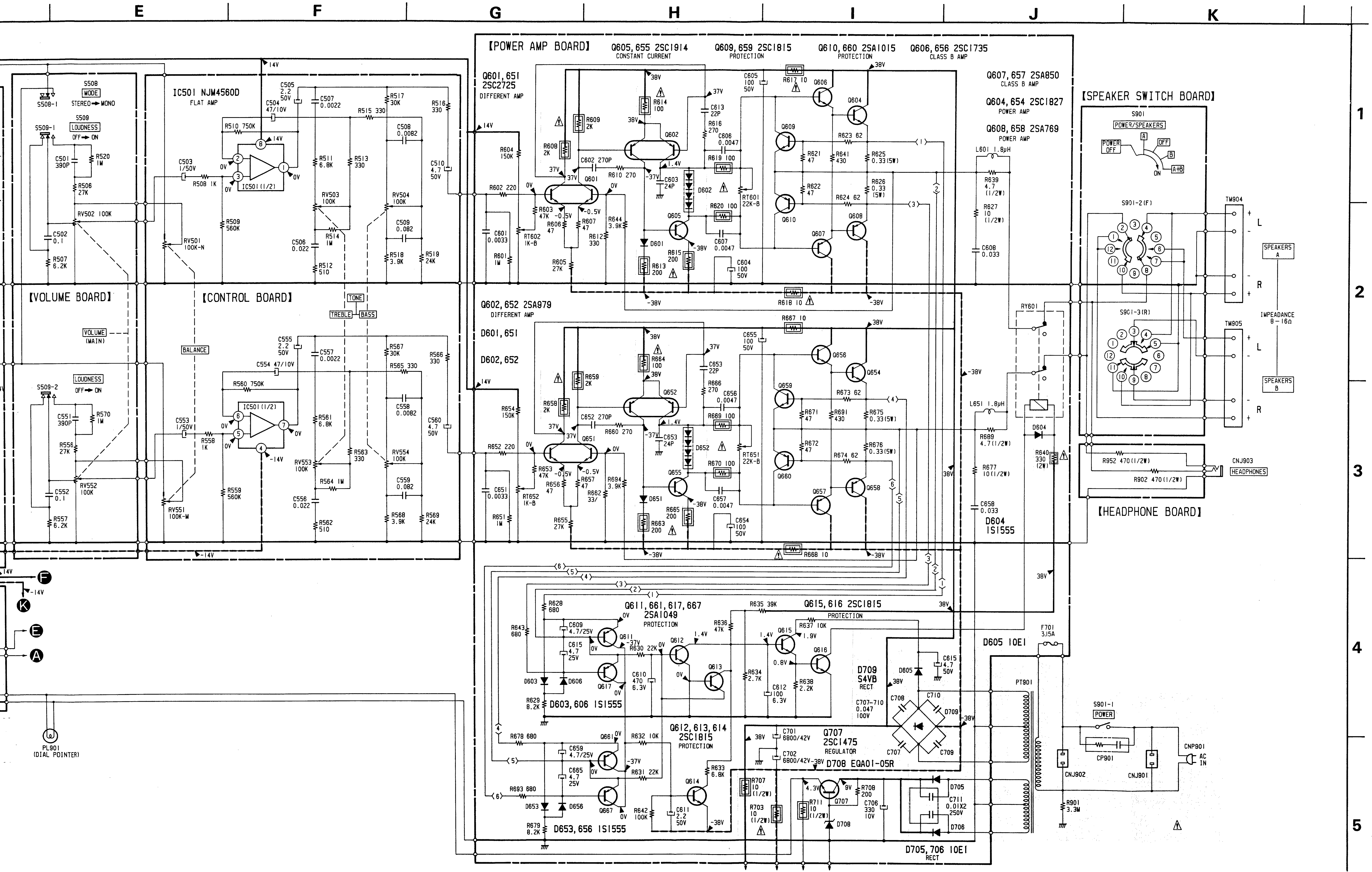

A
B
C
D
E
F
G
H
1
2
3
4
5
【TUNER BOARD (1/2)】
[FRONT-END] FE801
Q1 2SK55 FM RF AMP
IC1 FM MIX/OSC
Q801, 802 2SC710 FM IF AMP
IC801 μPC1167C FM IF
D801 1S1555
IC101 μPC1161
FM 75Ω
FM 300Ω
AM
ANT
T1
CF801
CF802
IFT801
S METER CIRCUIT
MUTE CIRCUIT
MUTE DRIVE CIRCUIT
LEVEL DET
OR CIRCUIT
0V SWITCH
QUADRATURE DET
AUDIO AMP
1ST IF AMP
2ND IF AMP
3RD IF AMP
AFC AMP
AUDIO MUTE CIRCUIT
S508-2
MODE
MONO
STEREO
【VOLUME BOARD】
V.C.O. 76KHZ
ST-MONO SW V.C.O. STOP SW
PREAMP
NF AMP
D804 MV-12N
D1 1S2236
D805 1S1555
D101 1S1555
D102 1S1555
IC201 μPC1178C AM RF AMP/IF AMP/DET
Q201, 202 2SC1815 AM MUTING
Q101 2SC1815 Q102 2SA1015 FM MUTING
IC802 μPC4558C ACUTE SERVO LOCK
Q803-805 2SC1815 ACUTE SERVO LOCK
Q806, 807 Q808, 809 2SC1815 2SA1015 LED DRIVE
D201 HZ7A3L
D202 1S1555
L901 FERRITE-ROD ANT
IFT201
IFT202
OSC
MIX
IF AMP
DET
RF AMP
AGC AMP
METER DRIVE
AF AMP
GND
Q812 2SC710 FM MUTING LEVEL
D803 1S1555
D806 MV-12N
D807 1S1555
Q811 2SC1815 ACUTE SERVO LOCK
D802 1S1555
D103 1S1555
Q810 2SC1815 LED DRIVE
D309 LOCKED
D301, 302, 3
ACUTE SERVO
D301, 30
SLP-141
S301 MUTING ON OFF
HIGH
LOW
OFF
S301-1
S301-2
S301-3
S301-4
S301-5
S301-6
【MUTING BOARD】
J


E
F
G
H
I
J
K
1
2
3
4
5
Q801, 802
2SC710
FM IF AMP
IC801
μPC1167C
FM IF
D801
1S1555
IC101
μPC1161C
FM MPX
Q103, 104
2SC1815
FM MUTING
S METER CIRCUIT
MUTE CIRCUIT
MUTE DRIVE CIRCUIT
OR CIRCUIT
0V SWITCH
LEVEL DET
1ST IF AMP
2ND IF AMP
3RD IF AMP
QUADRATURE DET
AUDIO AMP
AFC AMP
AUDIO MUTE CIRCUIT
IFT801
CF802
S508-2
MODE
MONO
STEREO
【VOLUME BOARD】
V.C.O. 76KHZ
PHASE LOCK DETECTOR
PILOT PRESENCE DETECTOR
STEREO SWITCH LAMP DRIVER
76KHZ TO 38KHZ DIVIDER
38KHZ TO 19KHZ DIVIDER
38KHZ TO 19KHZ DIVIDER
ST-MONO SW V.C.O. STOP SW
L-CH POST AMP
R-CH POST AMP
STEREO DEMODULATOR
PREAMP
NF AMP
LPF101
LPF102
MV-12N
D805 1S1555
D102 1S1555
D101 1S1555
2SC1815
AM MUTING
Q101 Q102
2SC1815 2SA1015
FM MUTING
Q710 Q703
2SC1826 2SC1815
DIFFERENTIAL AMP
D201
HZ7A3L
D202
1S1555
IC802
μPC4558C
ACUTE SERVO LOCK
Q803-805
2SC1815
ACUTE SERVO LOCK
Q806, 807 Q808, 809
2SC1815 2SA1015
LED DRIVE
D308
SLP-141B
STEREO
【DISPLAY BOARD】
IC301 LB1416
SIGNAL LEVEL
LOCKED
D707
EQA01-12R
D807 1S1555
Q811 2SC1815
ACUTE SERVO LOCK
Q812
2SC710
FM MUTING LEVEL
D803
1S1555
D806
MV-12N
D802 1S1555
D103 1S1555
Q810 2SC1815
LED DRIVE
D301, 302, 308
ACUTE SERVO LOCK
SIGNAL STRENGTH
D301, 302
SLP-141B
D309
SLP-241B
D303-307
SLP-241B
Q706 Q704 Q702, 705
2SA1015 2SB731 2SK34C
DIFFERENTIAL AMP
S301
MUTING
ON
OFF
HIGH
LOW
OFF
S301-1
S301-2
S301-3
S301-4
S301-5
S301-6
【MUTING BOARD】
A
B
C
D
E
F
G
H
I
J
K
14V
-14V
35V
-35V

4. SCHEMATIC DIAGRAM (AMP SECTION)

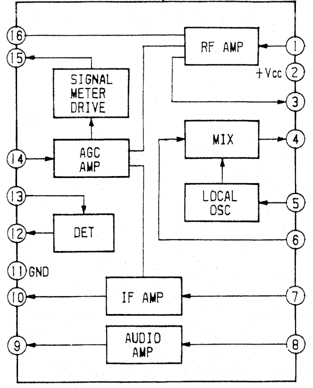
- See page 22 for the notes.


A
B
C
D
E
F
G
H
1
2
3
4
5
C
B
J
[JACK BOARD]
TM902-1
PHONO
INPUT
TM902-2
AUX
TM902-3
TAPE 1
TM901-1
REC OUT-1
TAPE RECORDER
TM901-2
TAPE 2
TM901-3
REC OUT-2
S501 4.7K
S502 4.7K
TM902-4
PHONO
INPUT
TM902-5
AUX
TM902-6
TAPE 1
TM901-4
REC OUT-1
TAPE RECORDER
TM901-5
TAPE 2
TM901-6
REC OUT-2
R551 4.7K
R552 4.7K
S501-1 PHONO
ON OFF
S502-1 FM
S503-1 AM
S504-1 AUX
S505-1 TAPE 1
S506-1 TAPE 2
S507-1 TAPE COPY 1-2
S501-504 FUNCTION
S505-507 MONITOR
S501-2 PHONO
S502-2 FM
S503-2 AM
S504-2 AUX
S505-2 TAPE 1
S506-2 TAPE 2
S507-2 TAPE COPY 1-2
IC401 M5214L
EQUALIZER
R409 1K
C408 22P
C401 2.2/50V
R402 47
-13V
-0.05V
-0.1V
14V
-0.7V
R408 330
R412 2.2K
IC401
-14V
R406 10K
R405 120K
R407 100
C409 3.3 50V
R410 220
R411 100K
R401 100K
C403 100P
R403 100K
R404 220
C402 470 6.3V
C407 0.0075
C406 0.027
C405 470P
14V
[TUNER BOARD (1/2)]
-14V
IC451 M5214L
EQUALIZER
R459 1K
C458 22P
C451 2.2/50V
R452 47
R458 330
R462 2.2K
IC451
R456 10K
R455 120K
R457 100
C459 3.3 50V
R460 220
R461 100K
R451 100K
C453 100P
R453 100K
R454 220
C452 470 6.3V
C457 0.0075
C456 0.027
C455 470
-14V
14V
-14V
F
K
E
A
S505 TAPE 1
S506 TAPE 2
S507 TAPE COPY 1-2
OFF → ON
S502-4 FM
S503-4 AM
C512 3.3/50V
S501-3 PHONO
S502-3 FM
S503-3 AM
S504-3 AUX
OFF ← ON
OFF → ON
[FUNCTION BOARD]
PL501
PL502
PL503
PL504
PL505
PL506
PL507
PL901 (DIAL POINTER)
S508 MODE
S508-1
STEREO → MONO
S509 LOUDNESS
S509-1
OFF → ON
C501 390P
R520 1M
R506 27K
RV502 100K
C502 0.1
R507 6.2K
[VOLUME BOARD]
VOLUME (MAIN)
LOUDNESS
S509-2
C551 390P
R570 1M
R556 27K
RV552 100K
C552 0.1
R557 6.2K
IC501 NJM4560D
FLAT AMP
14V
C505 2.2 50V
C504 47/10V
C507 0.0022
R517 30K
R515 330
R516 330
R510 750K
C508 0.0082
C503 1/50V
R508 1K
IC501 (1/2)
R511 6.8K
R513 330
C510 4.7 50V
RV501 100K-N
R509 560K
RV503 100K
RV504 100K
R514 1M
C509 0.082
C506 0.022
R512 510
R518 3.9K
R519 24K
[CONTROL BOARD]
TONE
TREBLE
BASS
BALANCE
C555 2.2 50V
C557 0.0022
R567 30K
R565 330
R566 330
C554 47/10V
R560 750K
IC501 (1/2)
C558 0.0082
C553 1/50V
R558 1K
R561 6.8K
R563 330
C560 4.7 50V
RV553 100K
RV554 100K
R564 1M
C559 0.082
RV551 100K-M
R559 560K
C556 0.022
R562 510
R568 3.9K
R569 24K
-14V
[POWER AMP BOARD]
Q605, 655 2SC1914
CONSTANT CURRENT
Q609, 659
PROTECTI
Q601, 651 2SC2725
DIFFERENT AMP
14V
38V
R614 100
37V
C613 22P
R616 270
C606 0.0047
R609 2K
R608 2K
Q602
R604 150K
C602 270P
37V
Q601
R610 270
-37V
C603 24P
1.4V
R619 100
R602 220
0V
R603 47K
-0.5V
R606 47
R607 47
R612 330
R644 3.9K
D602
R620 100
RT6 22K
C601 0.0033
RT602 1K-B
Q605
D601
-38V
C607 0.0047
R601 1M
R605 27K
R615 200
R613 200
C604 100 50V
-38V
Q602, 652 2SA979
DIFFERENT AMP
D601, 651
D602, 652
R664 100
R659 2K
R658 2K
R654 150K
C653 22P
R666 270
C656 0.0047
C652 270P
Q652
Q651
R660 270
C653 24P
R669 100
R652 220
R653 47K
R656 47
R657 47
R662 33
R694 3.9K
D652
R670 100
C651 0.0033
RT652 1K-B
Q655
D651
C657 0.0047
R651 1M
R655 27K
R665 200
R663 200
C654 100 50V
-38V
Q611, 661, 617, 667
2SA1049
PROTECTION
R628 680
R643 680
C609 4.7/25V
C615 4.7 25V
Q611
R630 22K
Q612
R636 47K
1.4V
Q613
D603
D606
Q617
C610 470 6.3V
R629 8.2K
D603, 606 1S1555
Q612, 613, 614
2SC1815
PROTECTION
R678 680
Q661
R632 10K
C659 4.7/25V
C665 4.7 25V
R631 22K
R633 6.8K
Q614
R693 680
D653
D656
Q667
R642 100K
C611 2.2 50V
R679 8.2K
D653, 656 1S1555
G

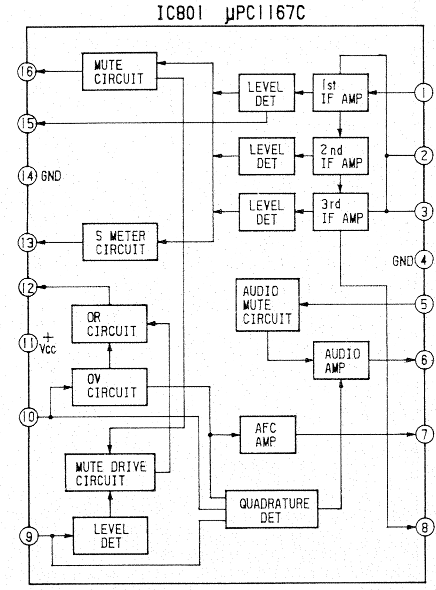

E
F
G
H
I
J
K
1
2
3
4
5
【POWER AMP BOARD】
【VOLUME BOARD】
【CONTROL BOARD】
【SPEAKER SWITCH BOARD】
【HEADPHONE BOARD】
IC501 NJM4560D
FLAT AMP
Q601, 651 2SC2725
DIFFERENT AMP
Q602, 652 2SA979
DIFFERENT AMP
D601, 651
D602, 652
Q605, 655 2SC1914
CONSTANT CURRENT
Q609, 659 2SC1815
PROTECTION
Q610, 660 2SA1015
PROTECTION
Q606, 656 2SC1735
CLASS B AMP
Q607, 657 2SA850
CLASS B AMP
Q604, 654 2SC1827
POWER AMP
Q608, 658 2SA769
POWER AMP
Q611, 661, 617, 667
2SA1049
PROTECTION
Q612, 613, 614
2SC1815
PROTECTION
Q615, 616 2SC1815
PROTECTION
Q707
2SC1475
REGULATOR
D708 EQA01-05R
D709
S4VB
RECT
D605 10E1
D705, 706 10E1
RECT
D603, 606 1S1555
D653, 656 1S1555
D604
1S1555
S508
MODE
STEREO → MONO
S509
LOUDNESS
OFF → ON
VOLUME
(MAIN)
BALANCE
TONE
TREBLE
BASS
S901
POWER/SPEAKERS
POWER OFF
OFF
ON
A+B
TM904
TM905
SPEAKERS A
SPEAKERS B
IMPEDANCE 8-16Ω
CNJ903
HEADPHONES
PT901
F701
3.15A
S901-1
POWER
CP901
CNP901
AC IN
CNJ901
CNJ902
R901
3.3M
PL901
(DIAL POINTER)
RY601
14V
-14V
38V
-38V
37V
-37V
F
K
E
A
G
H
I
D

5. MOUNTING DIAGRAM *— Conductor Side —*

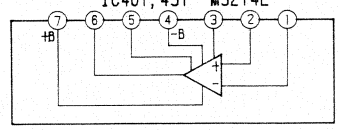
IC201 μPC1178C


RF AMP
+Vcc
SIGNAL METER DRIVE
AGC AMP
MIX
LOCAL OSC
DET
GND
IF AMP
AUDIO AMP
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16

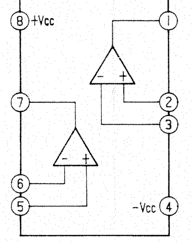
IC801 μPC1167C


MUTE CIRCUIT
LEVEL DET
1st IF AMP
LEVEL DET
2nd IF AMP
LEVEL DET
3rd IF AMP
GND
S METER CIRCUIT
AUDIO MUTE CIRCUIT
OR CIRCUIT
+Vcc
OV CIRCUIT
AUDIO AMP
AFC AMP
MUTE DRIVE CIRCUIT
QUADRATURE DET
LEVEL DET
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16

IC401, 451 M5214L

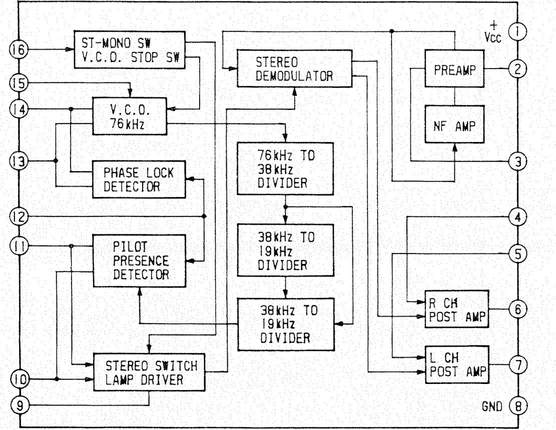


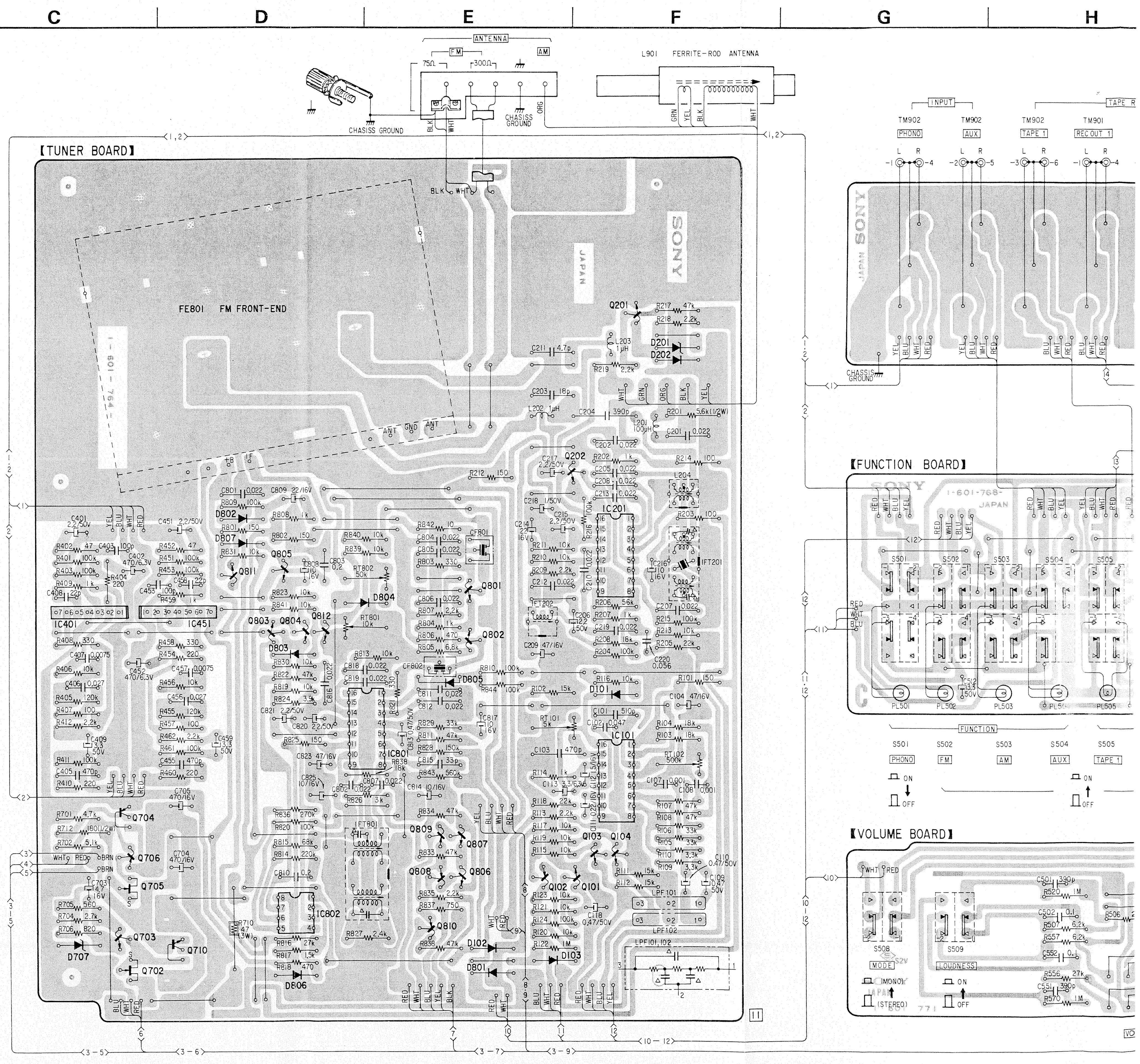
IC802 μPC4558C

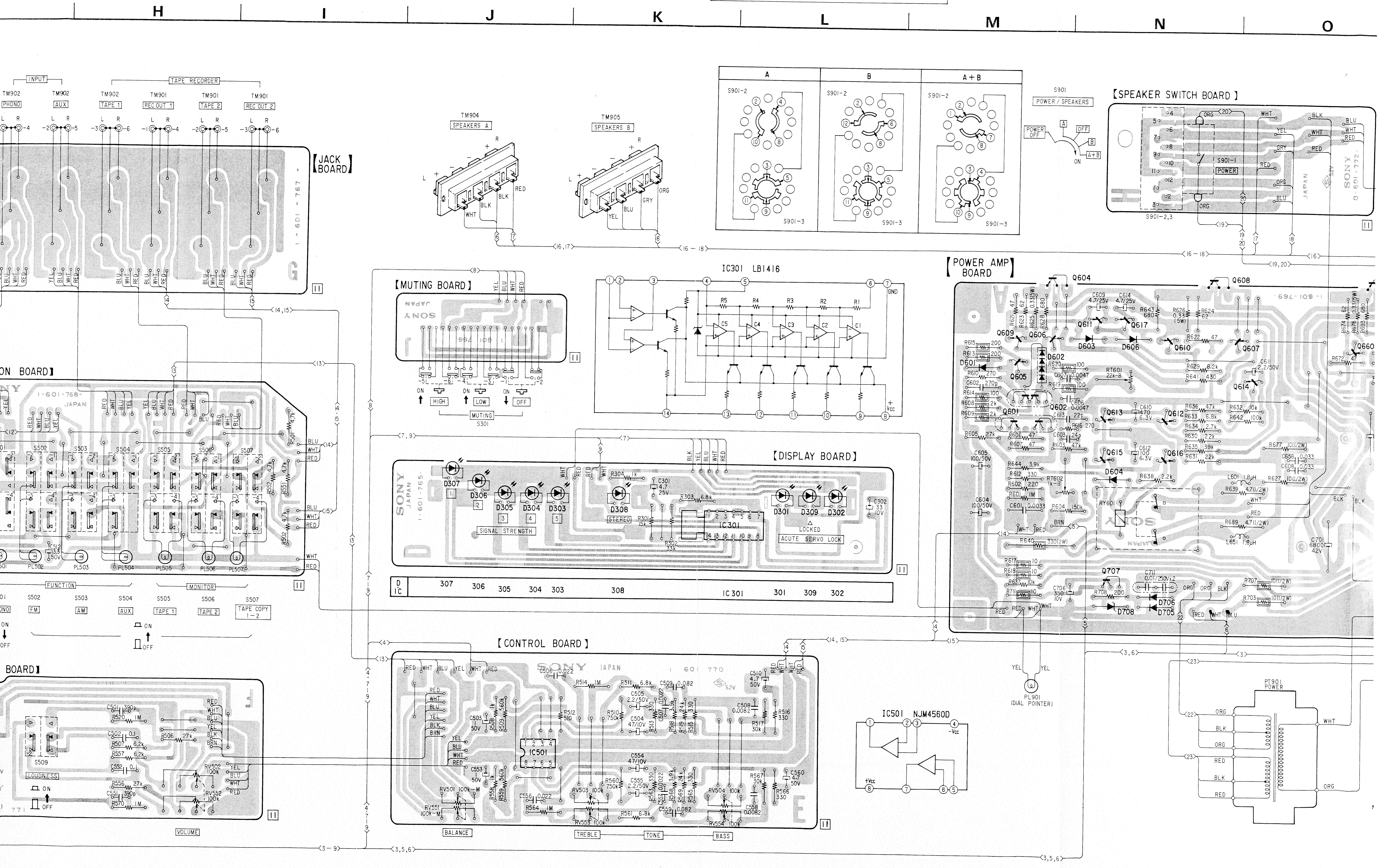

8
+Vcc
1
2
3
4
-Vcc
5
6
7

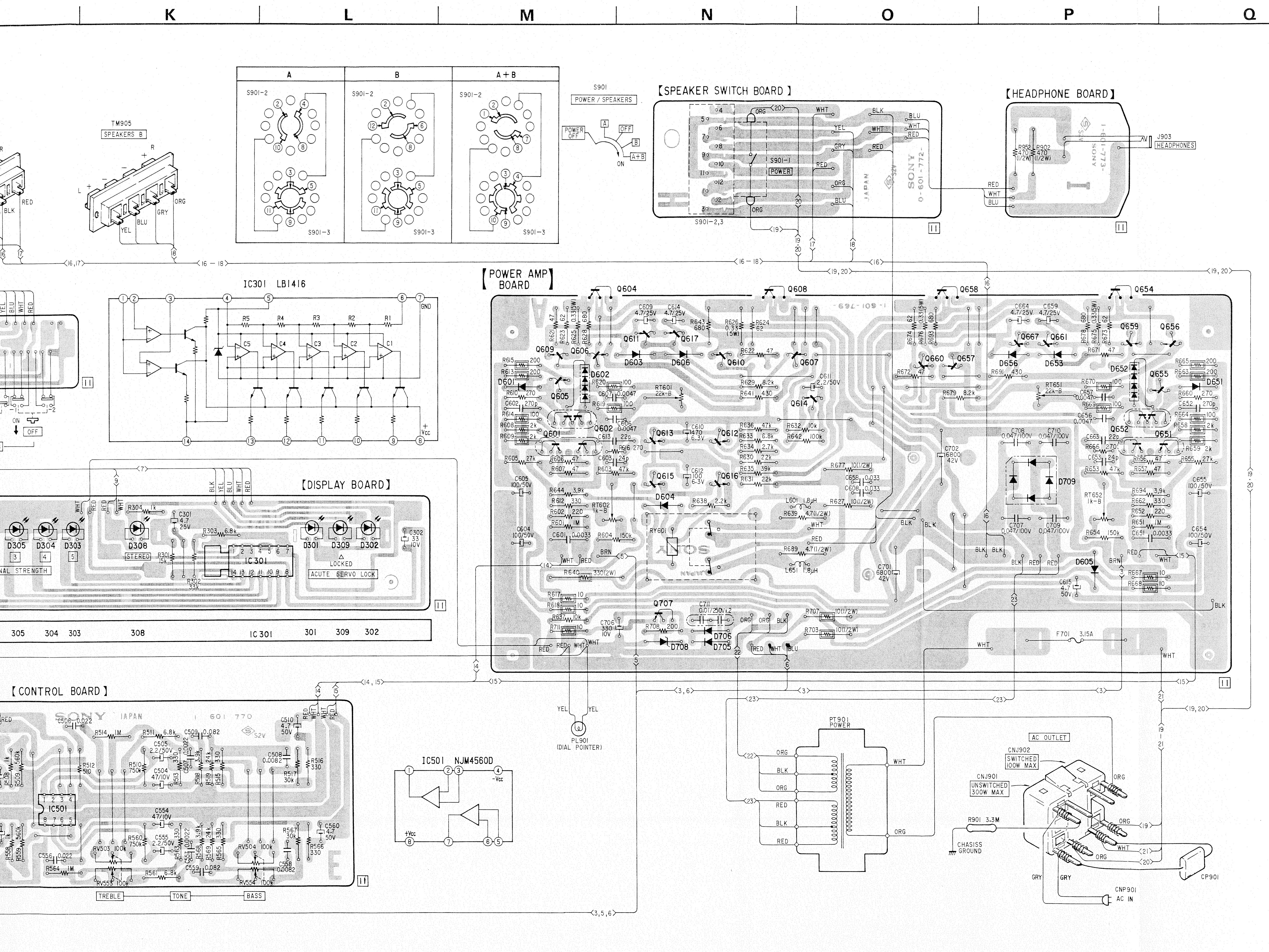
Q , IC	D
	201 202
201	
202	
	802
	807
IC 201	
805 811	
801	804
IC401, IC451	
803, 804, 812	
802	803
	805
	101
IC801	
IC101	
704	
809, 807	
706 103, 104 808, 806 102, 101 705	
IC802	
810	
703	
710	707 102 103 801 806
702	
Q , IC	D

IC101 μPC1161C


ST-MONO SW V.C.O. STOP SW
STEREO DEMODULATOR
PREAMP
+Vcc
V.C.O. 76kHz
NF AMP
PHASE LOCK DETECTOR
76kHz TO 38kHz DIVIDER
PILOT PRESENCE DETECTOR
38kHz TO 19kHz DIVIDER
38kHz TO 19kHz DIVIDER
R CH POST AMP
STEREO SWITCH LAMP DRIVER
L CH POST AMP
GND
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16


A
B
C
D
E
F
G
H
1
2
3
4
5
ANTENNA
FM
AM
75Ω
300Ω
CHASIS GROUND
BLK
WHT
ORG
L901 FERRITE-ROD ANTENNA
GRN
YEL
BLK
WHT
【TUNER BOARD】
FE801 FM FRONT-END
1-601-764-
SONY
JAPAN
ANT GND ANT
IC201
IC401
IC451
IC801
IC802
IC101
CF801
IFT201
IFT202
IFT801
LPF101, 102
Q201
Q202
Q801
Q802
Q803
Q804
Q805
Q806
Q807
Q808
Q809
Q810
Q811
Q812
Q101
Q102
Q103
Q104
Q702
Q703
Q704
Q705
Q706
Q710
D201
D202
D802
D803
D804
D805
D806
D807
D801
D101
D102
D103
D707
RT801 10k
RT802 50k
RT101 5k
RT102 500k
INPUT
TM902
TM901
PHONO
AUX
TAPE 1
REC OUT 1
TAPE R
CHASSIS GROUND
【FUNCTION BOARD】
1-601-768-
S501
S502
S503
S504
S505
PL501
PL502
PL503
PL505
FUNCTION
PHONO
FM
AM
AUX
TAPE 1
ON
OFF
【VOLUME BOARD】
S508
S509
MODE
LOUDNESS
(MONO)
(STEREO)
ON
OFF
RED
WHT
BLU
YEL
1, 2
3-5
3-6
3-7
3-9
10-12


H
I
J
K
L
M
N
O
INPUT
TAPE RECORDER
TM902 PHONO
TM902 AUX
TM902 TAPE 1
TM901 REC OUT 1
TM901 TAPE 2
TM901 REC OUT 2
【JACK BOARD】
1-601-767
TM904 SPEAKERS A
TM905 SPEAKERS B
A
B
A+B
S901-2
S901-3
S901 POWER / SPEAKERS
POWER OFF
OFF
ON
【SPEAKER SWITCH BOARD】
S901-1 POWER
S901-2,3
【MUTING BOARD】
HIGH
LOW
OFF
MUTING S301
IC301 LB1416
【POWER AMP BOARD】
ON BOARD】
1-601-768
S502
S503
S504
S505
S506
S507
FUNCTION
MONITOR
S502 FM
S503 AM
S504 AUX
S505 TAPE 1
S506 TAPE 2
S507 TAPE COPY 1-2
【DISPLAY BOARD】
1-601-765
D307
D306
D305
D304
D303
D308
D301
D309
D302
SIGNAL STRENGTH
STEREO
LOCKED
ACUTE SERVO LOCK
IC301
D IC
307 306 305 304 303 308 IC301 301 309 302
BOARD】
S509
LOUDNESS
VOLUME
【CONTROL BOARD】
1-601-770
IC501
RV501 100k-M
RV551 100k-M
BALANCE
RV503 100k
RV553 100k
TREBLE
TONE
RV504 100k
RV554 100k
BASS
IC501 NJM4560D
PL901 (DIAL POINTER)
PT901 POWER
RY601
Q604
Q608
Q707
D708
D706
D705
SONY
JAPAN


K
L
M
N
O
P
Q
R
1
2
3
4
5
A
B
A+B
S901-2
S901-3
S901
POWER / SPEAKERS
POWER OFF
A
OFF
B
A+B
ON
TM905
SPEAKERS B
R
L
RED
BLK
ORG
GRY
BLU
YEL
【SPEAKER SWITCH BOARD】
S901-1
POWER
S901-2,3
JAPAN
SONY
1-601-772-
【HEADPHONE BOARD】
R952 470 (1/2W)
R902 470 (1/2W)
J903
HEADPHONES
1-601-773-
IC301 LB1416
GND
+Vcc
【POWER AMP】 BOARD
Q604
Q608
Q658
Q654
1-601-769-
【DISPLAY BOARD】
D305
D304
D303
D308
D301
D309
D302
IC301
STEREO
LOCKED
ACUTE SERVO LOCK
NAL STRENGTH
305
304
303
308
IC301
301
309
302
RY601
F701 3.15A
D709
C702 6800 42V
C701 6800 42V
PL901 (DIAL POINTER)
【CONTROL BOARD】
SONY JAPAN
1-601-770
IC501
IC501 NJM4560D
-Vcc
+Vcc
TREBLE
TONE
BASS
RV553 100k
RV554 100k
PT901 POWER
AC OUTLET
CNJ902 SWITCHED 100W MAX
CNJ901 UNSWITCHED 300W MAX
R901 3.3M
CHASSIS GROUND
CP901
CNP901 AC IN

Q, IC	D
604,608 658,654	
611,617	
667,661	
659,656	
609,606	603,606
610,607	656,653
660,657	
605	602 652
655	601 651
614	
602 652	
613,612	
601 651	
615,616	709
	604
	605
707	
	706
	708,705
Q, IC	D

Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Note: Les composants identifiés par une trame et une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

Note:

- All capacitors are in μF unless otherwise noted. pF : $\mu\mu$F 50WV or less are not indicated except for electrolytics and tantalum.
- All resistors are in ohms, ¼W unless otherwise noted. kΩ : 1000Ω, MΩ : 1000kΩ
- ▭ : nonflammable resistor.
- △ : internal component.
- ▭ : panel designation.
- ——: B+ bus.
- — — —: B– bus.
- Voltages are dc with respect to ground unless otherwise noted.
- Readings are taken under with a VOM (20kΩ/V).

  no mark: { FM section (FM stereo)
  AM section (detuned)

  (   ) : FM (detuned)
- Voltage variations may be noted due to normal production tolerances.
- Switch

Ref. No.	Switch	Position
S301-1 to 6	MUTING	OFF
S501-1 to 3	PHONO	ON
S502-1 to 4	FM	OFF
S503-1 to 4	AM	OFF
S504-1 to 3	AUX	OFF
S505-1 to 4	TAPE 1	OFF
S506-1 to 4	TAPE 2	OFF
S507-1 to 4	TAPE COPY 1→2	OFF
S508-1, 2	MODE	STEREO
S509-1, 2	LOUDNESS	OFF
S901-1 to 3	POWER/SPEAKERS	POWER OFF

–26

FM STEREO/FM-AM RECEIVER STR-V35

US Model
Canadian Model

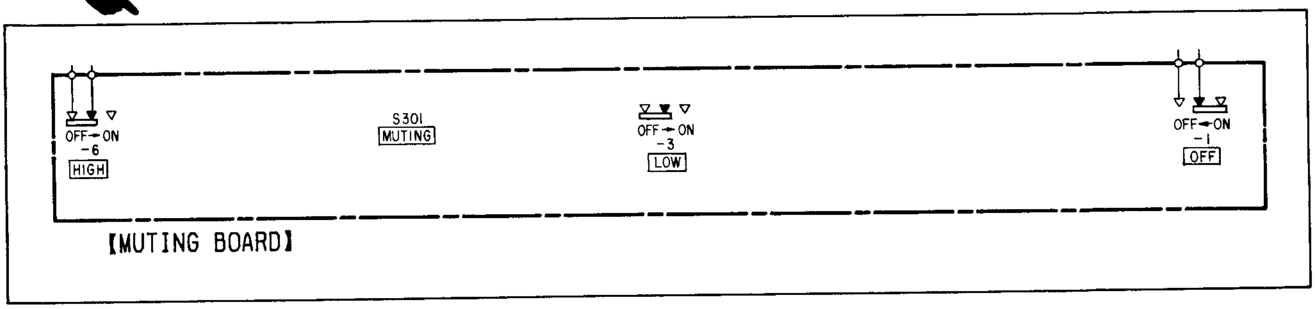
CORRECTION

No. 1
August, 1981

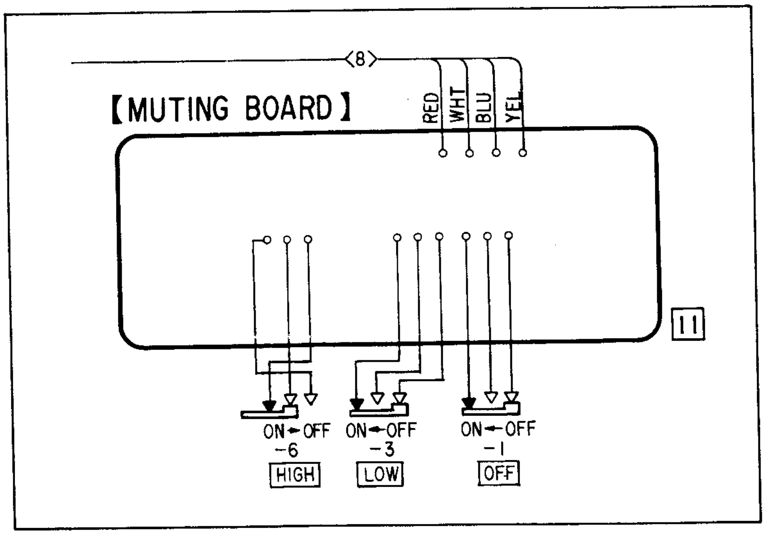
File this correction with
the service manual.

- : corrected portion

- SCHEMATIC DIAGRAM (Tuner Section) – page 18 –


S301
MUTING
OFF←ON
-6
HIGH
OFF←ON
-3
LOW
OFF←ON
-1
OFF
[MUTING BOARD]

- MOUNTING DIAGRAM (Conductor Side) – page 14 –


⟨8⟩
[MUTING BOARD]
RED
WHT
BLU
YEL
11
ON←OFF
-6
HIGH
ON←OFF
-3
LOW
ON←OFF
-1
OFF

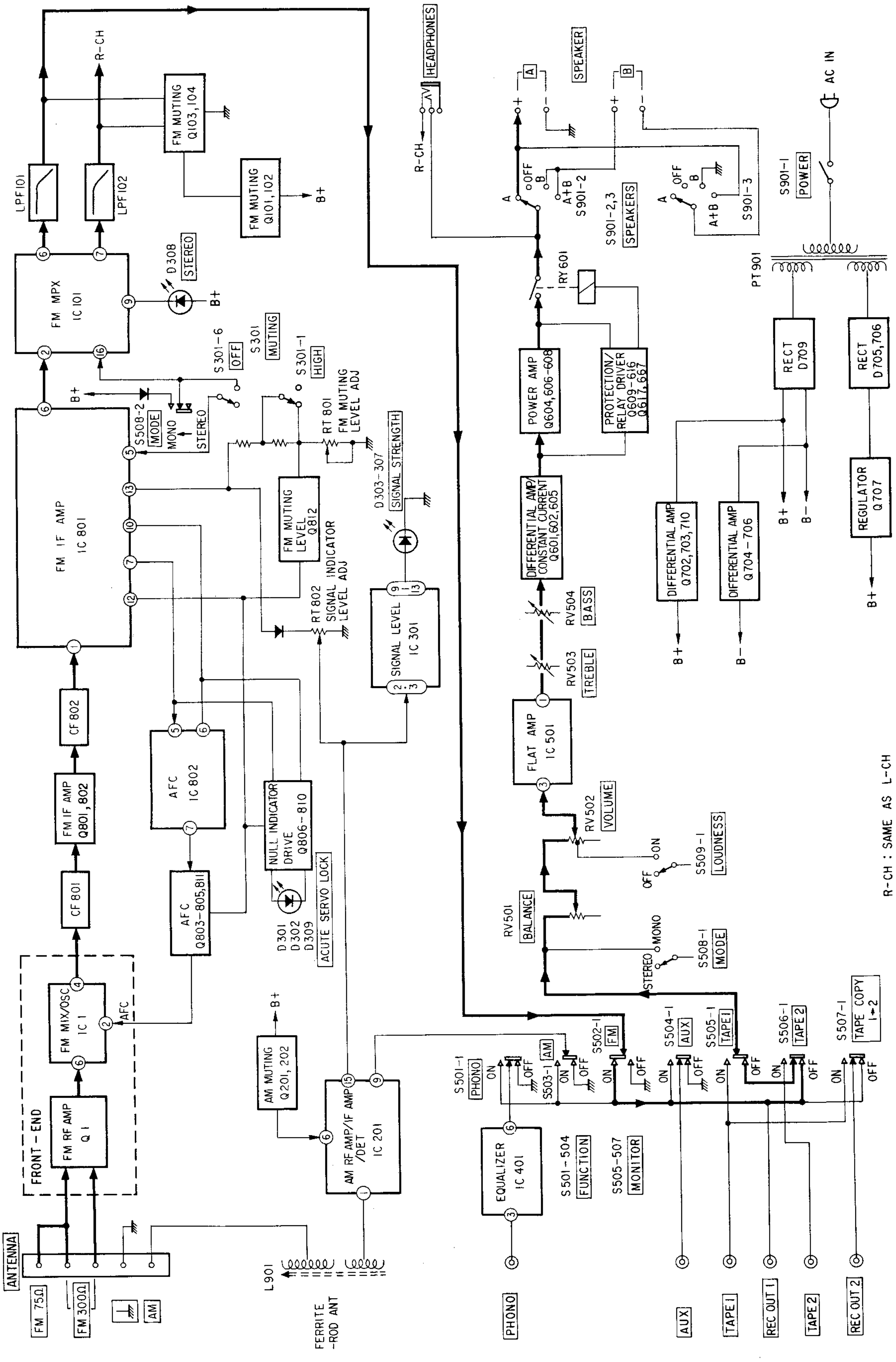
SONY®
SERVICE MANUAL

Sony Corporation

© 1981

9-958-780-91
81H0447-1
Printed in Japan

SECTION 1
BLOCK DIAGRAM

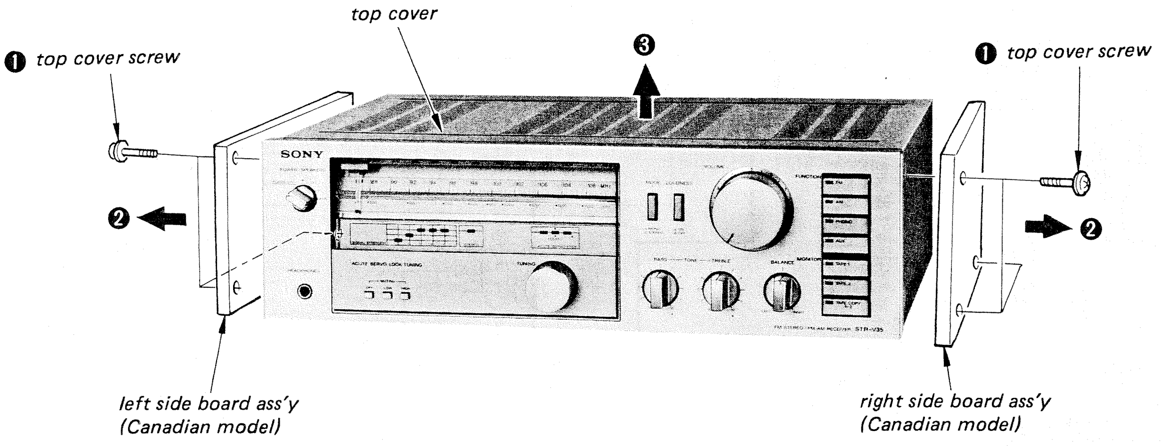

ANTENNA
FM 75Ω
FM 300Ω
AM
FRONT-END
FM RF AMP
Q1
FM MIX/OSC
IC1
AFC
CF801
FM IF AMP
Q801,802
CF802
FM IF AMP
IC801
FM MPX
IC101
LPF101
LPF102
FM MUTING
Q103,104
FM MUTING
Q101,102
R-CH
B+
D308
STEREO
S301-6
OFF
S301
MUTING
S301-1
HIGH
S508-2
MODE
MONO
STEREO
RT801
FM MUTING
LEVEL ADJ
FM MUTING
LEVEL
Q812
D303-307
SIGNAL STRENGTH
RT802
SIGNAL INDICATOR
LEVEL ADJ
SIGNAL LEVEL
IC301
AFC
IC802
AFC
Q803-805,811
NULL INDICATOR
DRIVE
Q806-810
D301
D302
D309
ACUTE SERVO LOCK
L901
FERRITE
-ROD ANT
AM MUTING
Q201,202
AM RF AMP/IF AMP
/DET
IC201
PHONO
EQUALIZER
IC401
S501-1
PHONO
S503-1
AM
S502-1
FM
S504-1
AUX
S505-1
TAPE1
S506-1
TAPE2
S507-1
TAPE COPY
1→2
ON
OFF
S501-504
FUNCTION
S505-507
MONITOR
AUX
TAPE1
REC OUT 1
TAPE2
REC OUT 2
S508-1
MODE
RV501
BALANCE
RV502
VOLUME
S509-1
LOUDNESS
FLAT AMP
IC501
RV503
TREBLE
RV504
BASS
DIFFERENTIAL AMP/
CONSTANT CURRENT
Q601,602,605
POWER AMP
Q604,606-608
PROTECTION/
RELAY DRIVER
Q609-616
Q617,667
RY601
HEADPHONES
A
SPEAKER
B
S901-2
S901-3
S901-2,3
SPEAKERS
OFF
A+B
AC IN
S901-1
POWER
PT901
RECT
D709
RECT
D705,706
REGULATOR
Q707
DIFFERENTIAL AMP
Q702,703,710
DIFFERENTIAL AMP
Q704-706
B+
B−
R-CH : SAME AS L-CH

SECTION 2
DISASSEMBLY

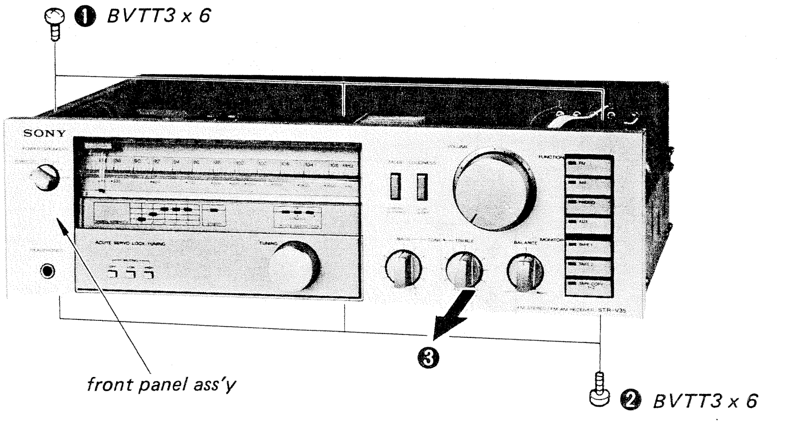
2-1. REMOVAL

Note: Follow the disassembly procedure in the numerical order given.

TOP COVER


top cover
❸
❶ top cover screw
❶ top cover screw
❷
❷
left side board ass'y
(Canadian model)
right side board ass'y
(Canadian model)

FRONT PANEL


❶ BVTT3 x 6
❸
front panel ass'y
❷ BVTT3 x 6

BOTTOM PLATE

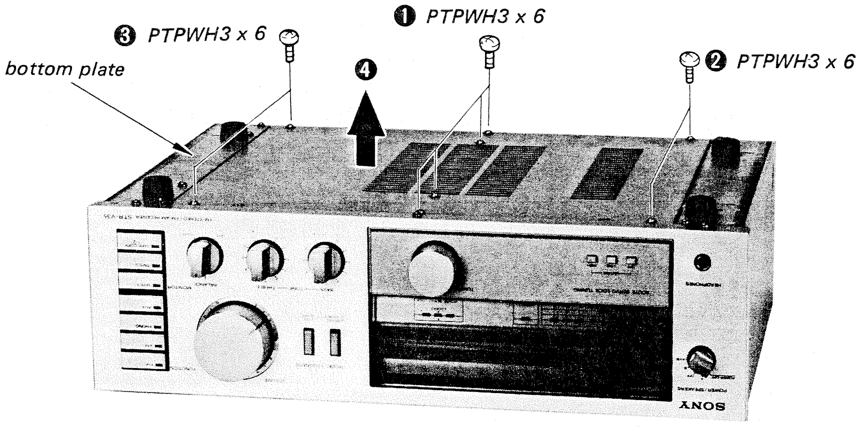
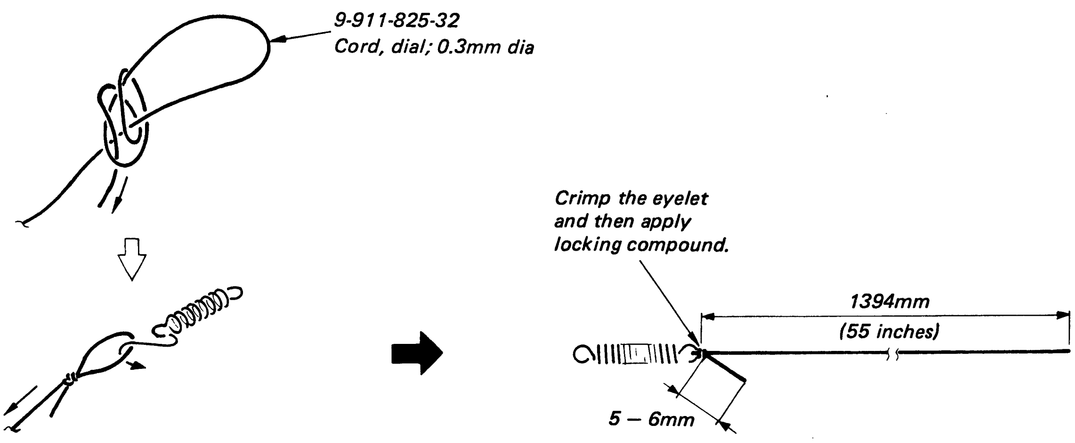

❶ PTPWH3 x 6
❸ PTPWH3 x 6
bottom plate
❹
❷ PTPWH3 x 6

Photo : US model

2-2. DIAL CORD STRINGING

1. Preparation

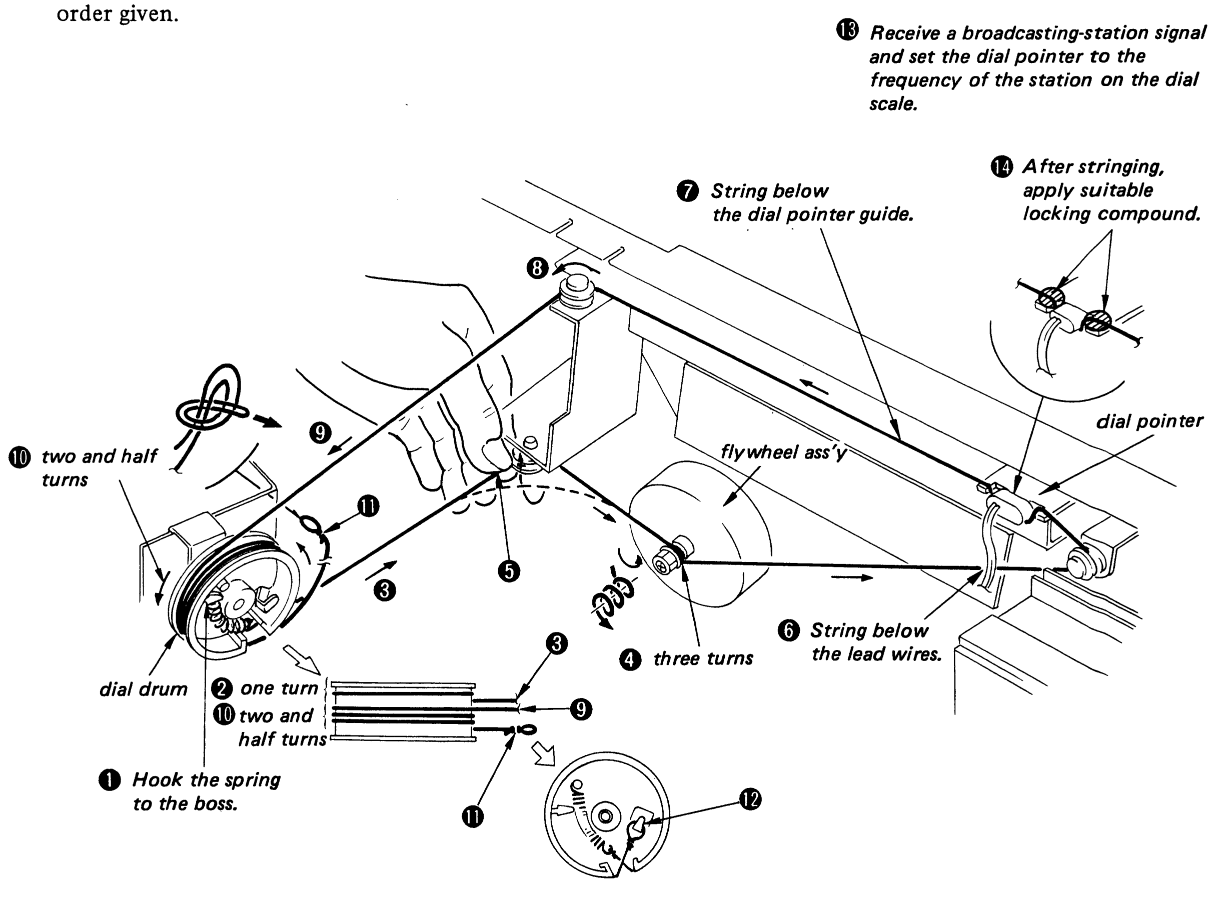

9-911-825-32
Cord, dial; 0.3mm dia
1394mm
(55 inches)
5 – 6mm

Crimp the eyelet and then apply locking compound.

2. Stringing

1). Turn the tuning capacitor shaft fully clockwise, and set the dial drum to the position as illustrated.

2). Follow the stringing procedure in the numerical order given.


⑧
⑨
③
⑤
⑪
flywheel ass'y
dial pointer
dial drum
③
⑨
⑪
⑫

① Hook the spring to the boss.

② one turn

③

④ three turns

⑤

⑥ String below the lead wires.

⑦ String below the dial pointer guide.

⑧

⑨

⑩ two and half turns

⑪

⑫

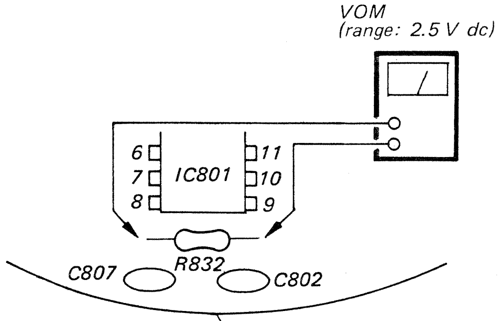
⑬ Receive a broadcasting-station signal and set the dial pointer to the frequency of the station on the dial scale.

⑭ After stringing, apply suitable locking compound.

SECTION 3
ELECTRICAL ADJUSTMENTS

TUNER SECTION

FM Discriminator Alignment 1


VOM
(range: 2.5 V dc)
6
7
8
IC801
11
10
9
R832
C807
C802

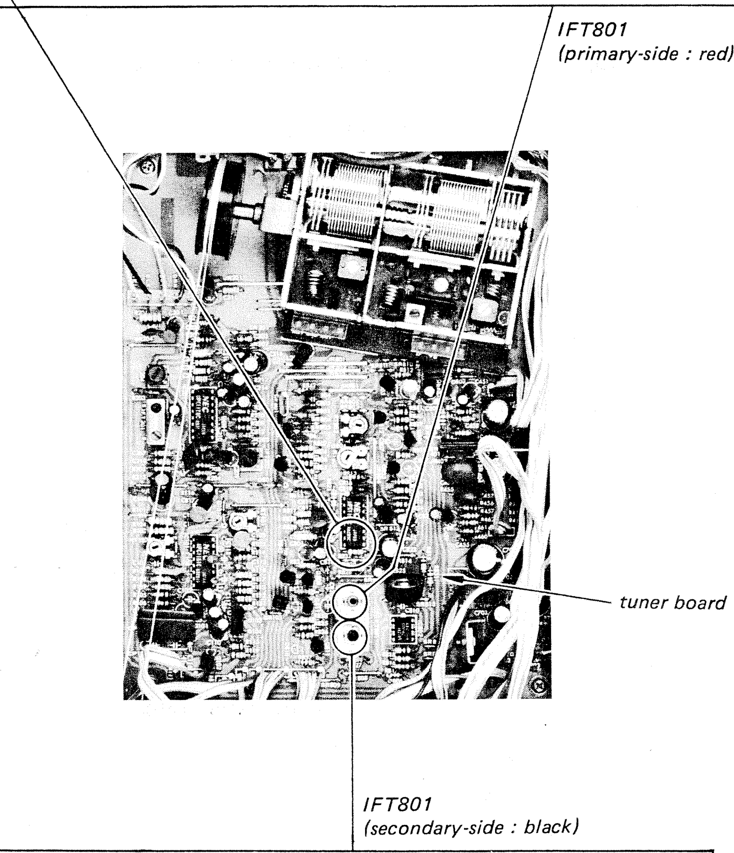
Setting:

MODE switch: MONO

Procedure:

1. Detune the set.
2. Adjust the red core (primary-side) of IFT801 for 0 V dc reading on VOM.

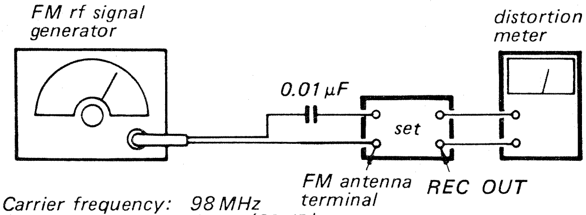
Note: Repeat the secondary-side and primary-side adjustments several times.


IFT801
(primary-side : red)
tuner board
IFT801
(secondary-side : black)

FM Discriminator Alignment 2

Setting:

MODE switch: MONO


FM rf signal
generator
0.01 μF
set
distortion
meter
FM antenna
terminal
REC OUT

Carrier frequency: 98 MHz
Output level: 1 mV (60 dB)
Modulation: 400 Hz, 75 kHz deviation (100 %)

Procedure:

Adjust the black core (secondary side) of IFT801 for minimum distortion.

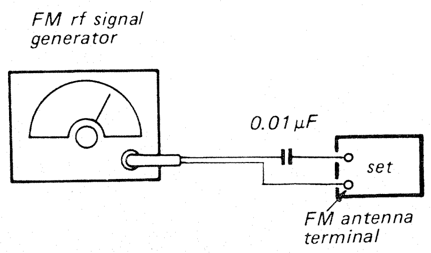
VCO Adjustment

A) Regular Method

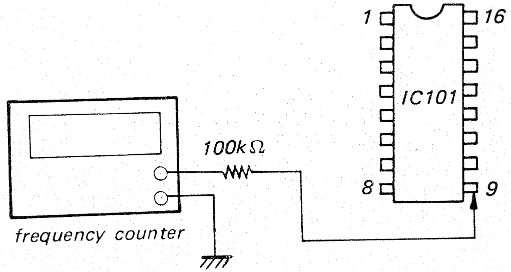
Setting:

MODE switch: MONO

Procedure:


FM rf signal generator
0.01 µF
set
FM antenna terminal

Carrier frequency:	*98 MHz*
Modulation:	*400 Hz, 75 kHz deviation (100%)*
Output level:	*1 mV (60 dB)*

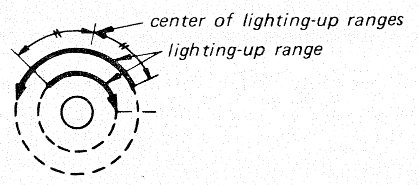

1
16
IC101
8
9
100kΩ
frequency counter

1. Tune the set to 98 MHz.
2. Adjust RT101 for 76 kHz ± 100 Hz on the counter.

B) Simple Method

Procedure:

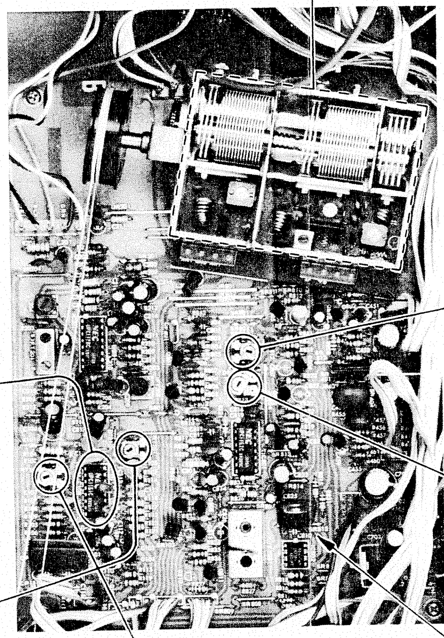
1. Tune the set to the FM stereo broadcasting signal.
2. Turn RT101 clockwise or counterclockwise and memorize the lighting-up range of the stereo lamp.
3. Secure RT101 at the center of the lighting-up range of both turns as shown below.


center of lighting-up ranges
lighting-up range

FREQUENCY COVERAGE ADJUSTMENT, TRACKING ADJUSTMENT and IF ALIGNMENT

The front-end section has been carefully adjusted at the factory, so the adjustment is unnecessary in the field.

FRONT-END SECTION

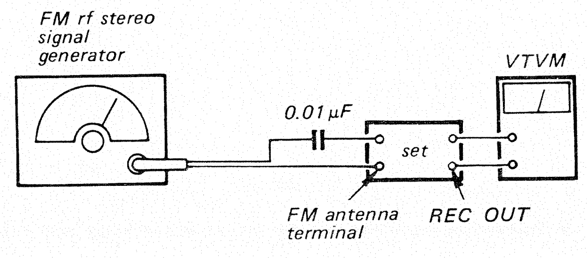

RT802
RT801
RT101
RT102
tuner board

FM Stereo Separation Adjustment

Setting:

MODE switch: STEREO
MUTING switch: ON

Procedure:


FM rf stereo signal generator
0.01 µF
set
VTVM
FM antenna terminal
REC OUT

Carrier frequency:	*98 MHz*
Output level:	*1 mV (60 dB)*
Modulation:	
Audio (400 Hz):	*33.75 kHz deviation (45%)*
Pilot (19 kHz):	*7.5 kHz deviation (10%)*

FM stereo signal generator output channel	VTVM connection	VTVM reading (dB)
L-CH	L-CH	Ⓐ
R-CH	L-CH	Ⓑ Adjust RT102 for minimum reading.
R-CH	R-CH	Ⓒ
L-CH	R-CH	Ⓓ Adjust RT102 for minimum reading.

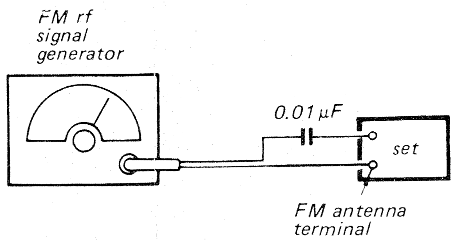
L-CH Stereo separation: Ⓐ – Ⓑ
R-CH Stereo separation: Ⓒ – Ⓓ

The separations of both channels should be equal.

Signal Indicator Level Adjustment

Setup:

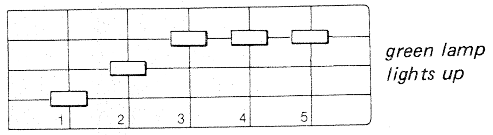
MODE switch: MONO


FM rf signal generator
0.01 µF
set
FM antenna terminal

Carrier frequency:	*98 MHz*
Modulation:	*400 Hz, 75 kHz deviation (100%)*
Output level:	*1 mV (60 dB)*

Procedure:

Tune the set to 98 MHz and adjust RT802 so that all signal elements light up. (See figure below.)

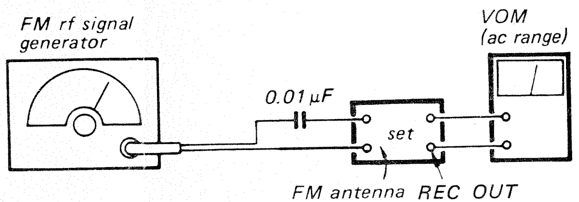

1
2
3
4
5
green lamp lights up

FM Muting Level Adjustment

Setting:

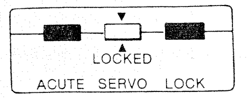
MODE switch: STEREO
MUTING switch: ON

Procedure:


FM rf signal generator
VOM (ac range)
0.01 µF
set
FM antenna terminal
REC OUT

Carrier frequency:	*98 MHz*
Modulation:	*400 Hz, 75 kHz deviation (100%)*
Output level:	*10 µV (20 dB)*

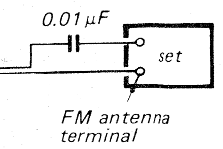
1. Tune the set to 98 MHz.
2. Turn RT801 and stop it just when the VOM indication suddenly decreases.
3. Receive a signal stronger than the muting level. Confirm that the ACUTE SERVO LOCK lamp (green) lights up. (See figure below.)


LOCKED
ACUTE SERVO LOCK

The green lamp at the center lights up.

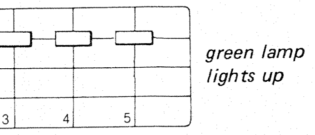
Adjustment

MONO


0.01 μF
set
FM antenna terminal

iHz
Hz, 75 kHz deviation
0%)
V (60 dB)

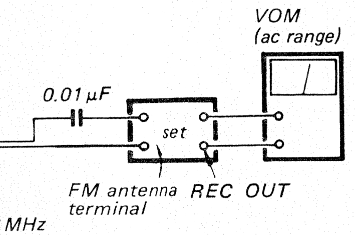
98 MHz and adjust RT802 so elements light up. (See figure


3
4
5
green lamp lights up

justment

STREO

n: ON

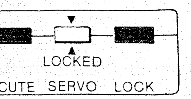

VOM
(ac range)
0.01 μF
set
FM antenna terminal
REC OUT

MHz
0 Hz, 75 kHz deviation
00%)
μV (20 dB)

98 MHz.

and stop it just when the VOM lenly decreases.

al stronger than the muting level. he ACUTE SERVO LOCK lamp up. (See figure below.)


LOCKED
CUTE SERVO LOCK

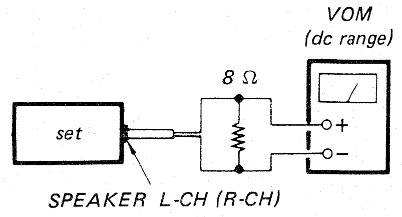
e green lamp at the nter lights up.

AUDIO SECTION

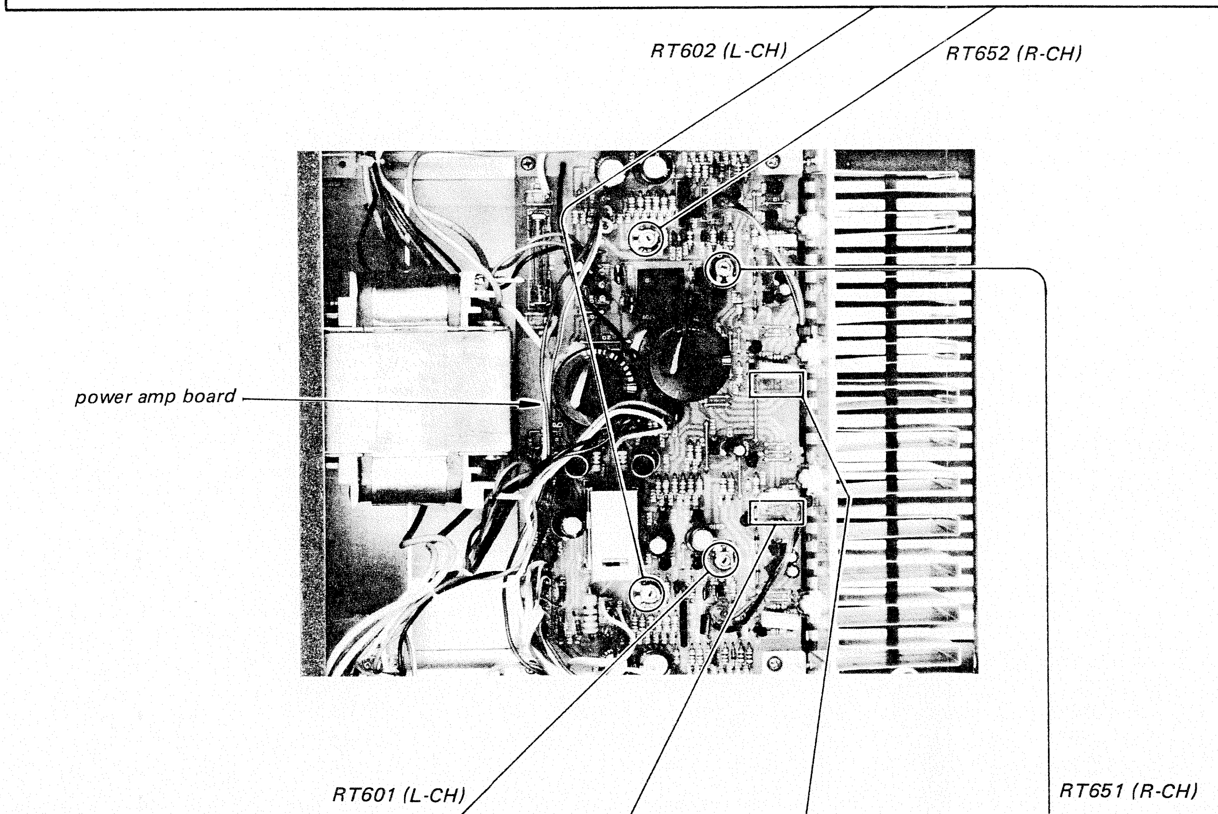
Note 1. DC bias and DC balance adjustments should be performed about five minutes later after the POWER switch is turned ON.

2 Repeat DC bias and DC balance adjustments two or three times.

DC Balance Adjustment (with no signal input)


VOM
(dc range)
8 Ω
set
+
−
SPEAKER L-CH (R-CH)

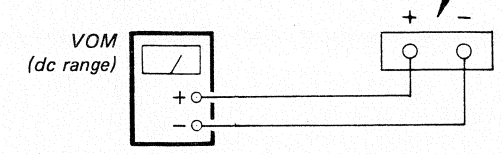
Adjust RT602 (L-CH) and RT652 (R-CH) for 0V dc reading on VOM.


RT602 (L-CH)
RT652 (R-CH)
power amp board
RT601 (L-CH)
RT651 (R-CH)

DC Bias Adjustment (with no signal input)

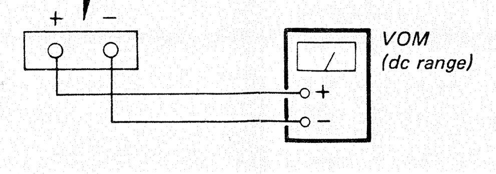
– L-CH –

Adjust RT601 for 20mV dc reading on VOM.


+
−
VOM
(dc range)
+
−

– R-CH –

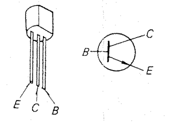
Adjust RT651 for 20mV dc reading on VOM.


+
−
VOM
(dc range)
+
−

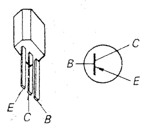
Replacement Semiconductors

For replacement, use semiconductors except in ( ).

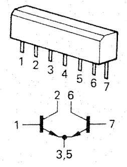
Q101, 103
Q104, 201
Q202, 609
Q659
Q612–616
Q803–807
Q811, 812 } : 2SC1364 (2SC1815)



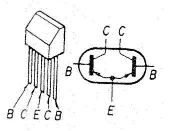
Q102, 610
Q660, 706
Q808–810 } : 2SA1027R (2SA1015)
Q611, 661
Q617, 667 } : 2SA1049



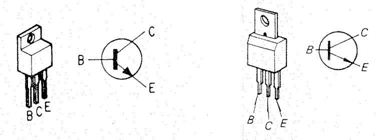
Q601, 651: 2SC2725


1 2 3 4 5 6 7
2 6
1
7
3,5

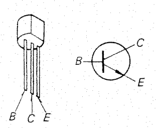
Q602, 652: 2SA979


C C
B
B
B C E C B
E

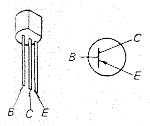
Q604, 654: 2SC1986D (2SC1827)


C
B
E
B C E
C
B
E
B C E

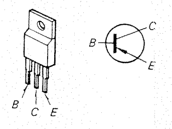
Q605, 655: 2SC1914A
Q606, 656: 2SC1735



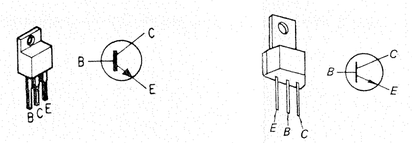
Q607, 657: 2SA850



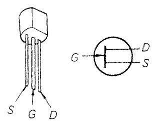
Q608, 658: 2SA771 (2SA769)



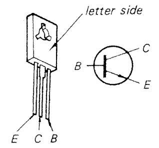
Q701: 2SC1986D (2SC1826)


C
B
E
B C E
C
B
E
E B C

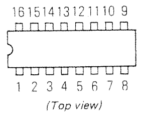
Q702, 705: 2SK34 (2SK34C)



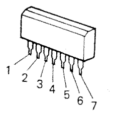
Q707: 2SD809


letter side
C
B
E
E C B

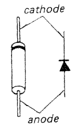
IC101: μPC1161C
IC201: μPC1178C
IC801: μPC1167C


16 15 14 13 12 11 10 9
1 2 3 4 5 6 7 8
(Top view)

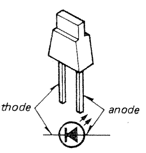
IC401, 451: M5214L



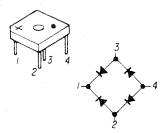
D101–103
D601
D603, 604
D606, 651
D653, 656
D801–803
D805, 807 } : 1S1555
D605, 705
D706 } : 10E2
D201: HZ11B2L


cathode
anode

D303–307
D309 } : SLP241B


cathode
anode

D709: S4VB40 (S4VB)



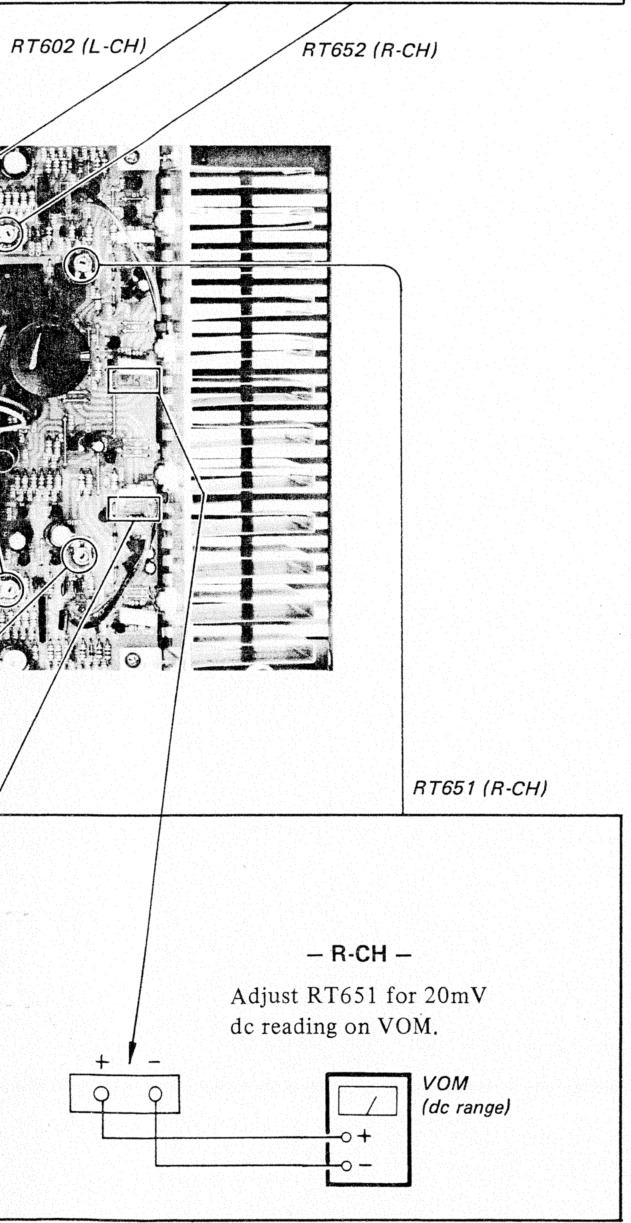
Q801,

D707:
D708:

D3

2 Repeat DC bias and DC balance adjustments two or three times.

Adjust RT602 (L-CH) and RT652 (R-CH) for 0V dc reading on VOM.


RT602 (L-CH)
RT652 (R-CH)
RT651 (R-CH)
+
–
VOM
(dc range)
+
–

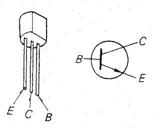
– R-CH –

Adjust RT651 for 20mV dc reading on VOM.

Replacement Semiconductors

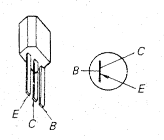
For replacement, use semiconductors except in (   ).

Q101, 103
Q104, 201
Q202, 609
Q659
Q612–616
Q803–807
Q811, 812
: 2SC1364 (2SC1815)

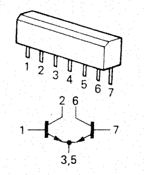


Q102, 610
Q660, 706
Q808–810
: 2SA1027R (2SA1015)

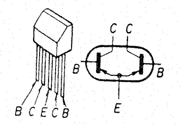
Q611, 661
Q617, 667
: 2SA1049



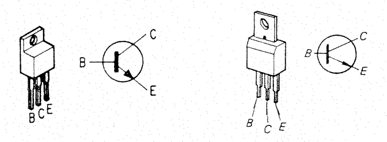
Q601, 651: 2SC2725


1 2 3 4 5 6 7
2 6
1
7
3,5

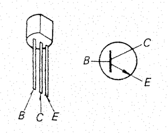
Q602, 652: 2SA979


C C
B
B
B C E C B
E

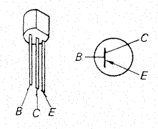
Q604, 654: 2SC1986D (2SC1827)


B C E
B
C
E
B C E
B
C
E

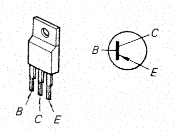
Q605, 655: 2SC1914A
Q606, 656: 2SC1735



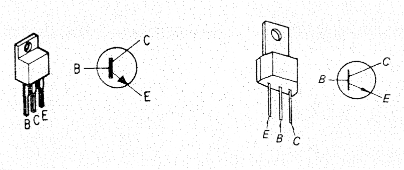
Q607, 657: 2SA850



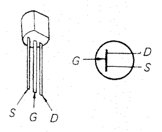
Q608, 658: 2SA771 (2SA769)



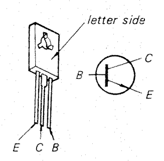
Q701: 2SC1986D (2SC1826)


B C E
B
C
E
E B C
B
C
E

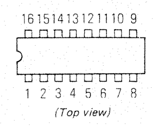
Q702, 705: 2SK34 (2SK34C)



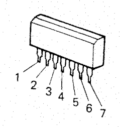
Q707: 2SD809


letter side
E C B
B
C
E

IC101: μPC1161C
IC201: μPC1178C
IC801: μPC1167C


16 15 14 13 12 11 10 9
1 2 3 4 5 6 7 8
(Top view)

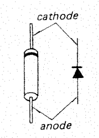
IC401, 451: M5214L



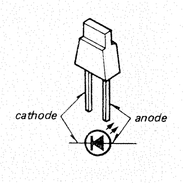
D101–103
D601
D603, 604
D606, 651
D653, 656
D801–803
D805, 807
: 1S1555

D605, 705
D706
: 10E2

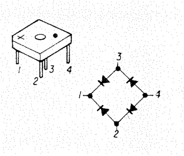
D201: HZ11B2L


cathode
anode

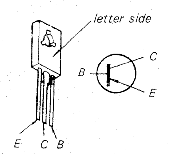
D303–307
D309
: SLP241B


cathode
anode

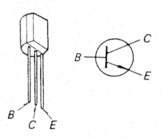
D709: S4VB40 (S4VB)



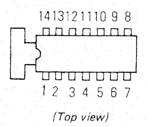
Q704: 2SB731


letter side
E C B
B
C
E

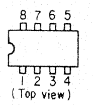
Q801, 802: 2SC710-14 (2SC710)



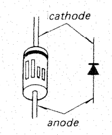
IC301: LB1416


14 13 12 11 10 9 8
1 2 3 4 5 6 7
(Top view)

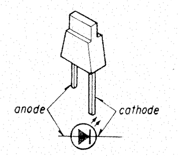
IC501: NJM4560D
IC802: μPC4558C


8 7 6 5
1 2 3 4
(Top view)

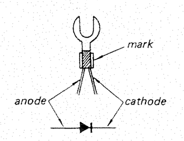
D707: EQB01-12Z (EQA01-12R)
D708: EQB01-05 (EQA01-05R)


cathode
anode

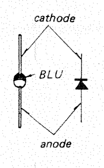
D301, 302, 308: SLP141B


anode
cathode

D602, 652: SV04S


mark
anode
cathode

D804, 806: MV12N


cathode
BLU
anode

Note on Schematic Diagram:

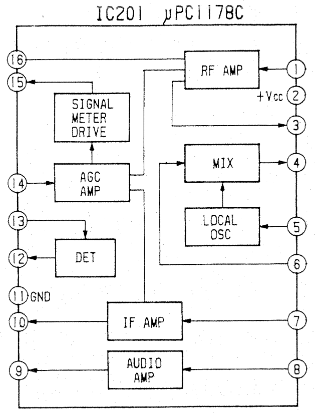
- All capacitors are in μF unless otherwise noted. pF : μμF 50WV or less are not indicated except for electrolytics and tantalum.
- All resistors are in ohms, ¼W unless otherwise noted. kΩ : 1000Ω, MΩ : 1000kΩ
- ▭ : nonflammable resistor.
- △ : internal component.
- ▭ : panel designation.
- ▭ : adjustment for repair.
- ——— : B+ bus.
- — — — : B– bus.
- Voltages are dc with respect to ground unless otherwise noted.
- Readings are taken under with a VOM (20kΩ/V).
  no mark: { FM section (FM stereo)
  AM section (detuned)
  (   ) : FM (detuned)
- Voltage variations may be noted due to normal production tolerances.
- Switch

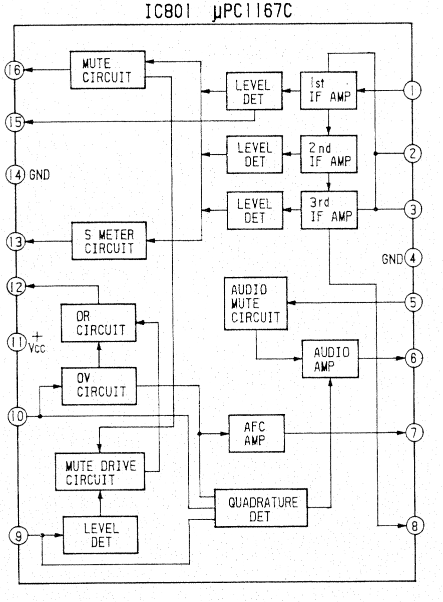
Ref. No.	Switch	Position
S301-1 to 6	MUTING	OFF
S501-1 to 3	PHONO	ON
S502-1 to 4	FM	OFF
S503-1 to 4	AM	OFF
S504-1 to 3	AUX	OFF
S505-1 to 4	TAPE 1	OFF
S506-1 to 4	TAPE 2	OFF
S507-1 to 4	TAPE COPY 1→2	OFF
S508-1, 2	MODE	STEREO
S509-1, 2	LOUDNESS	OFF
S901-1 to 3	POWER/SPEAKERS	POWER OFF

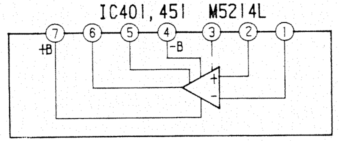
SECTION 4
DIAGRAMS

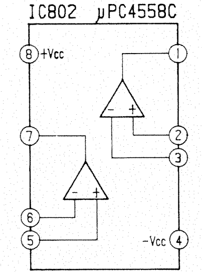
4-1. MOUNTING DIAGRAM
– Conductor Side –

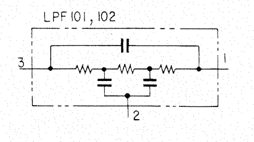
- See page 10 for the replacement semiconductors.

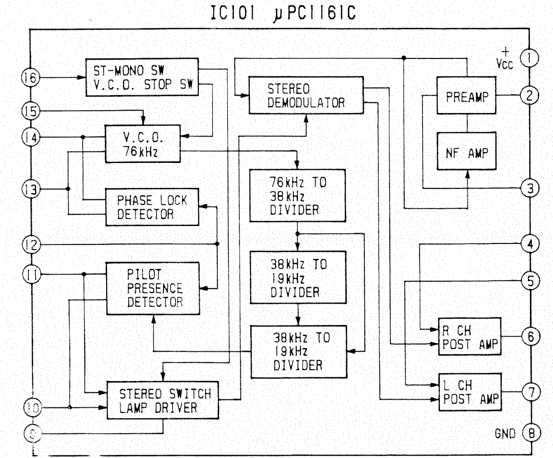

IC201 μPC1178C
RF AMP
+Vcc
SIGNAL METER DRIVE
MIX
AGC AMP
LOCAL OSC
DET
GND
IF AMP
AUDIO AMP


IC801 μPC1167C
MUTE CIRCUIT
LEVEL DET
1st IF AMP
LEVEL DET
2nd IF AMP
GND
LEVEL DET
3rd IF AMP
S METER CIRCUIT
GND
OR CIRCUIT
AUDIO MUTE CIRCUIT
+Vcc
OV CIRCUIT
AUDIO AMP
AFC AMP
MUTE DRIVE CIRCUIT
QUADRATURE DET
LEVEL DET

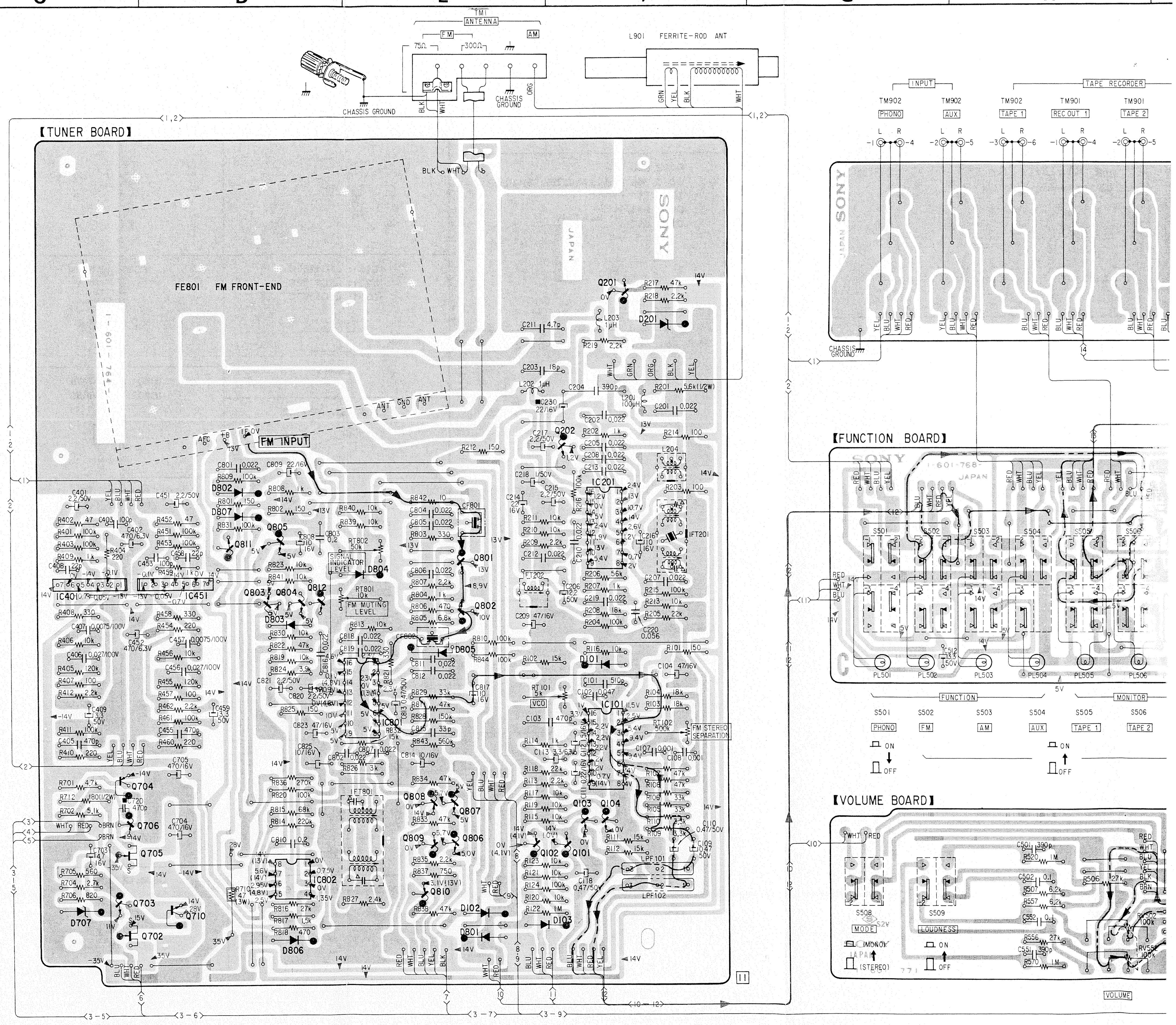

IC401, 451 M5214L
+B
-B

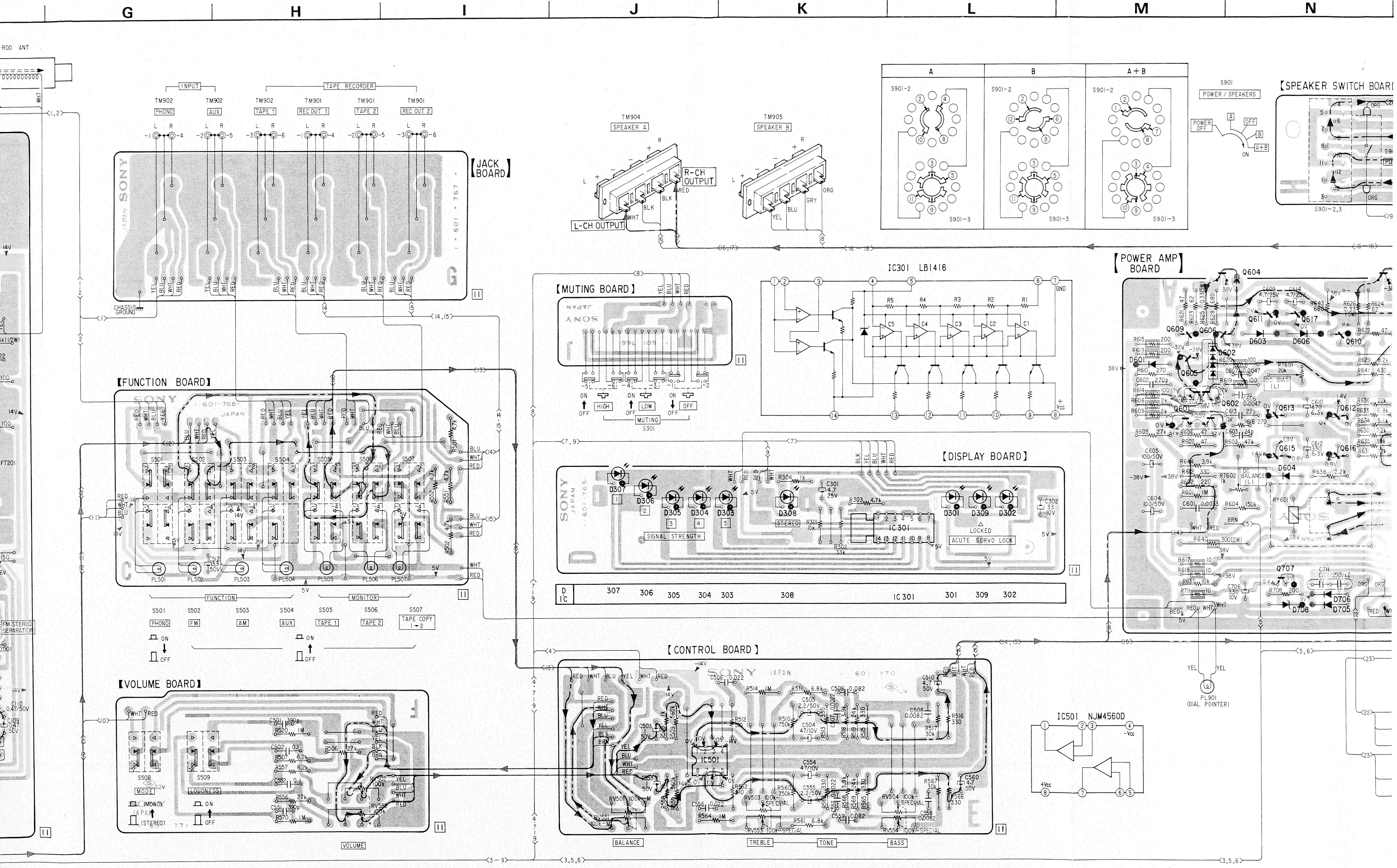

IC802 μPC4558C
+Vcc
-Vcc




IC101 μPC1161C
ST-MONO SW V.C.O. STOP SW
+Vcc
STEREO DEMODULATOR
PREAMP
V.C.O. 76kHz
NF AMP
PHASE LOCK DETECTOR
76kHz TO 38kHz DIVIDER
38kHz TO 19kHz DIVIDER
PILOT PRESENCE DETECTOR
38kHz TO 19kHz DIVIDER
R CH POST AMP
STEREO SWITCH LAMP DRIVER
L CH POST AMP
GND

Q, IC	D
201	
	201
202	
	802
	807
IC201	
805	
811	
801	804
IC401, IC451	
803, 804, 812	
802	803
	805
	101
IC801	
IC101	
704	
808, 807	
706 103, 104	
809, 806	
102, 101	
705	
IC802	
810	
703	
710	707
	102
	103
702	801
	806
Q, IC	D

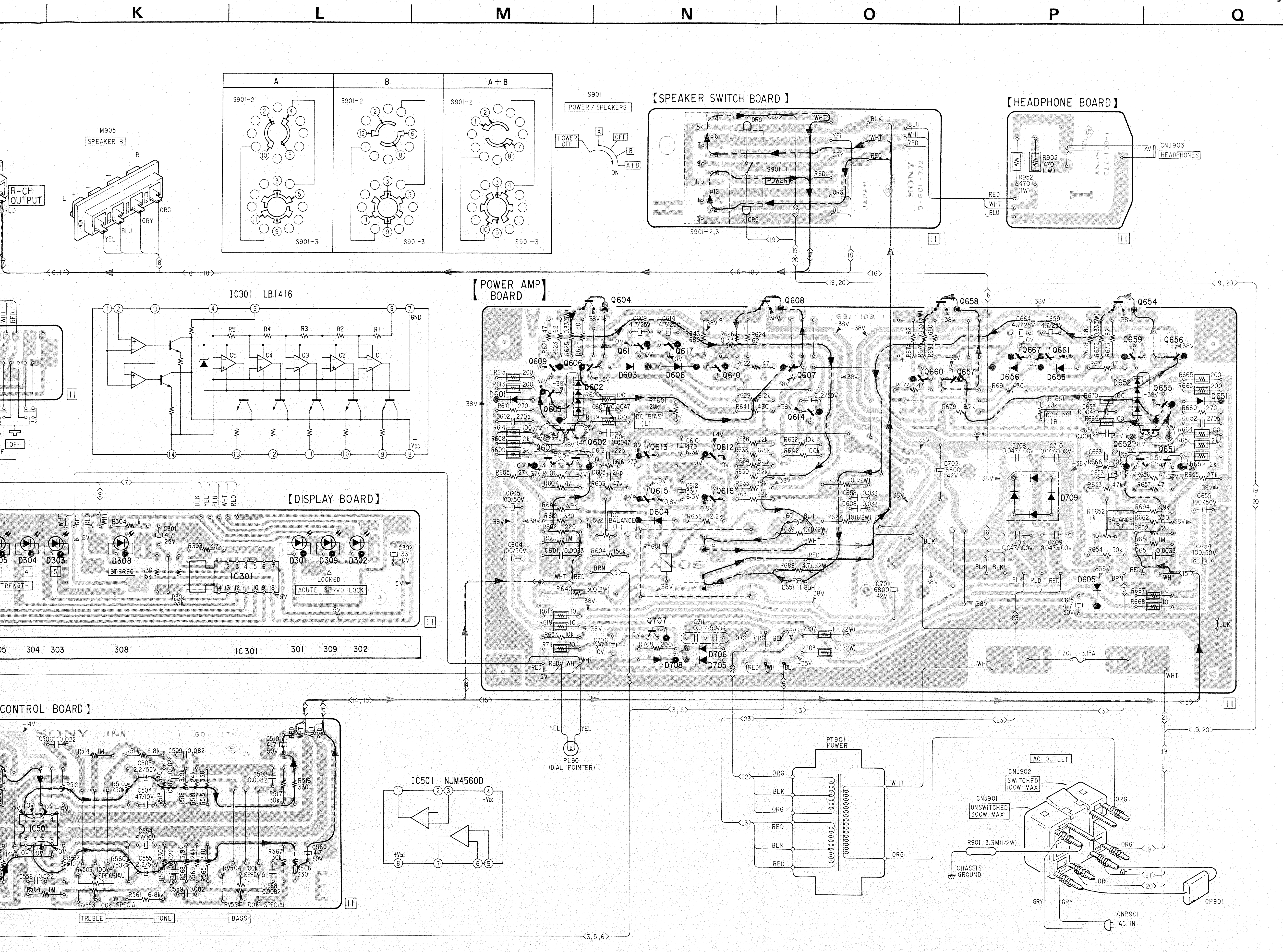

A
B
C
D
E
F
G
H
1
2
3
4
5
TM1 ANTENNA
FM
AM
75Ω
300Ω
CHASSIS GROUND
BLK
WHT
ORG
L901 FERRITE-ROD ANT
GRN
YEL
BLK
WHT
【TUNER BOARD】
FE801 FM FRONT-END
FM INPUT
SONY
JAPAN
SIGNAL INDICATOR LEVEL
RT802 50k
RT801 10k
FM MUTING LEVEL
CF801
IC201
IFT201
IFT202
IC401
IC451
IC801
IC802
IC101
IFT801
RT101 5k
VCO
RT102 500k
FM STEREO SEPARATION
LPF101
LPF102
Q201
Q202
Q801
Q802
Q803
Q804
Q805
Q811
Q812
Q101
Q102
Q103
Q104
Q702
Q703
Q704
Q705
Q706
Q710
Q806
Q807
Q808
Q809
Q810
D101
D102
D103
D201
D707
D801
D802
D803
D804
D805
D806
D807
14V
13V
-14V
-35V
35V
28V
INPUT
TAPE RECORDER
TM902
PHONO
TM902
AUX
TM902
TAPE 1
TM901
REC OUT 1
TM901
TAPE 2
L
R
CHASSIS GROUND
【FUNCTION BOARD】
S501
S502
S503
S504
S505
S506
PL501
PL502
PL503
PL504
PL505
PL506
C512 3.3 50V
5V
FUNCTION
MONITOR
S501
PHONO
S502
FM
S503
AM
S504
AUX
S505
TAPE 1
S506
TAPE 2
ON
OFF
ON
OFF
【VOLUME BOARD】
WHT
RED
S508
MODE
(MONO)
(STEREO)
S509
LOUDNESS
ON
OFF
C501 390p
R520 1M
C502 0.1
R507 6.2k
R557 6.2k
C552 0.1
R556 27k
C551 390p
R570 1M
R506 27k
RV502 100k
RV552 100k
VOLUME


G
H
I
J
K
L
M
N
ROD ANT
INPUT
TAPE RECORDER
TM902
PHONO
AUX
TAPE 1
TM901
REC OUT 1
TAPE 2
REC OUT 2
JACK BOARD
SONY
JAPAN
1-601-767
CHASSIS GROUND
TM904
SPEAKER A
TM905
SPEAKER B
R-CH OUTPUT
L-CH OUTPUT
A
B
A+B
S901-2
S901-3
S901
POWER / SPEAKERS
POWER OFF
ON
SPEAKER SWITCH BOARD
S901-2,3
MUTING BOARD
HIGH
LOW
OFF
MUTING
S301
IC301 LB1416
GND
POWER AMP BOARD
FUNCTION BOARD
1-601-768
DISPLAY BOARD
SIGNAL STRENGTH
STEREO
IC301
LOCKED
ACUTE SERVO LOCK
D307
D306
D305
D304
D303
D308
D301
D309
D302
FUNCTION
MONITOR
S501
S502
S503
S504
S505
S506
S507
PHONO
FM
AM
AUX
TAPE 1
TAPE 2
TAPE COPY 1→2
ON
OFF
CONTROL BOARD
1-601-770
IC501
BALANCE
TREBLE
TONE
BASS
VOLUME BOARD
S508
S509
MODE
LOUDNESS
MONO
STEREO
VOLUME
IC501 NJM4560D
+Vcc
-Vcc
PL901
(DIAL POINTER)
FM STEREO SEPARATION
DC BALANCE (L)
DC BIAS (L)
RY601

- ■ : part mounted on the conductor side.
- [ ]← : indicates side identified with part number.

▨ : B + pattern
▨ : B − pattern

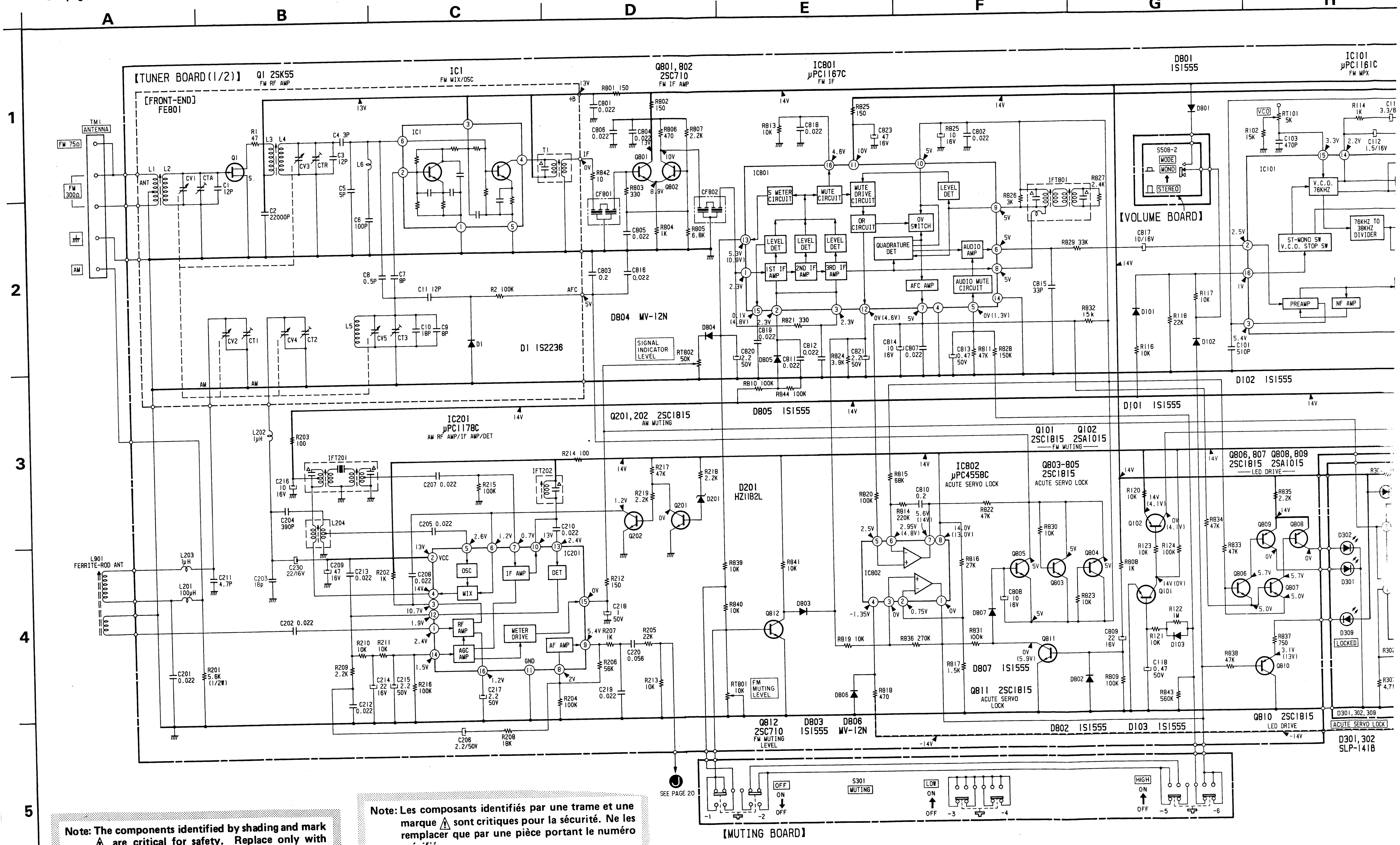
● ⇒ : signal path
● ⇒ : L-CH signal path
● ⇒ : R-CH signal path


K
L
M
N
O
P
Q
R
1
2
3
4
5
TM905
SPEAKER B
R-CH OUTPUT
S901
POWER / SPEAKERS
POWER OFF
A
B
A+B
OFF
ON
S901-2
S901-3
[SPEAKER SWITCH BOARD]
S901-1
POWER
S901-2,3
[HEADPHONE BOARD]
CNJ903
HEADPHONES
R902 470 (1W)
R952 470 (1W)
IC301 LB1416
[POWER AMP BOARD]
Q604
Q608
Q658
Q654
DC BIAS (L)
DC BIAS (R)
DC BALANCE (L)
DC BALANCE (R)
RY601
D709
F701 3.15A
C702 6800 42V
C701 6800 42V
[DISPLAY BOARD]
STEREO
LOCKED
ACUTE SERVO LOCK
IC301
CONTROL BOARD]
IC501
IC501 NJM4560D
TREBLE
TONE
BASS
PL901 (DIAL POINTER)
PT901 POWER
AC OUTLET
CNJ902 SWITCHED 100W MAX
CNJ901 UNSWITCHED 300W MAX
R901 3.3M(1/2W)
CHASSIS GROUND
CNP901 AC IN
CP901

Q,IC	D
604,608 658,654	
611,617 667,661 659,656 609,606 610,607 660,657 605 655	603,606 656,653 602 652 601 651
614	
602 652	
613, 612	
601 651	
615,616	709
	604
	605
707	
	706 708,705
Q,IC	D

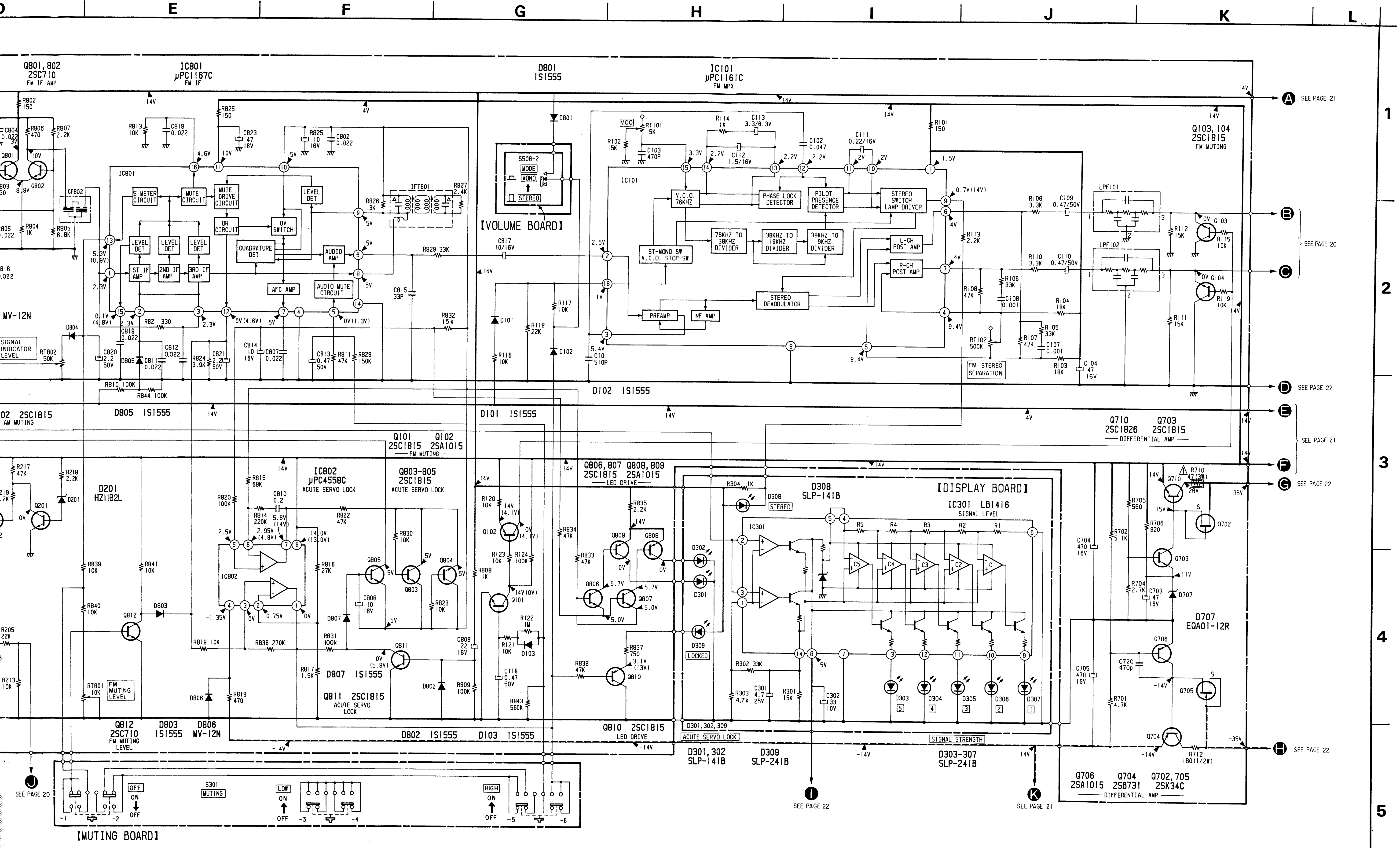
4-2. SCHEMATIC DIAGRAM (Tuner Section)

- See page 11 for the notes.

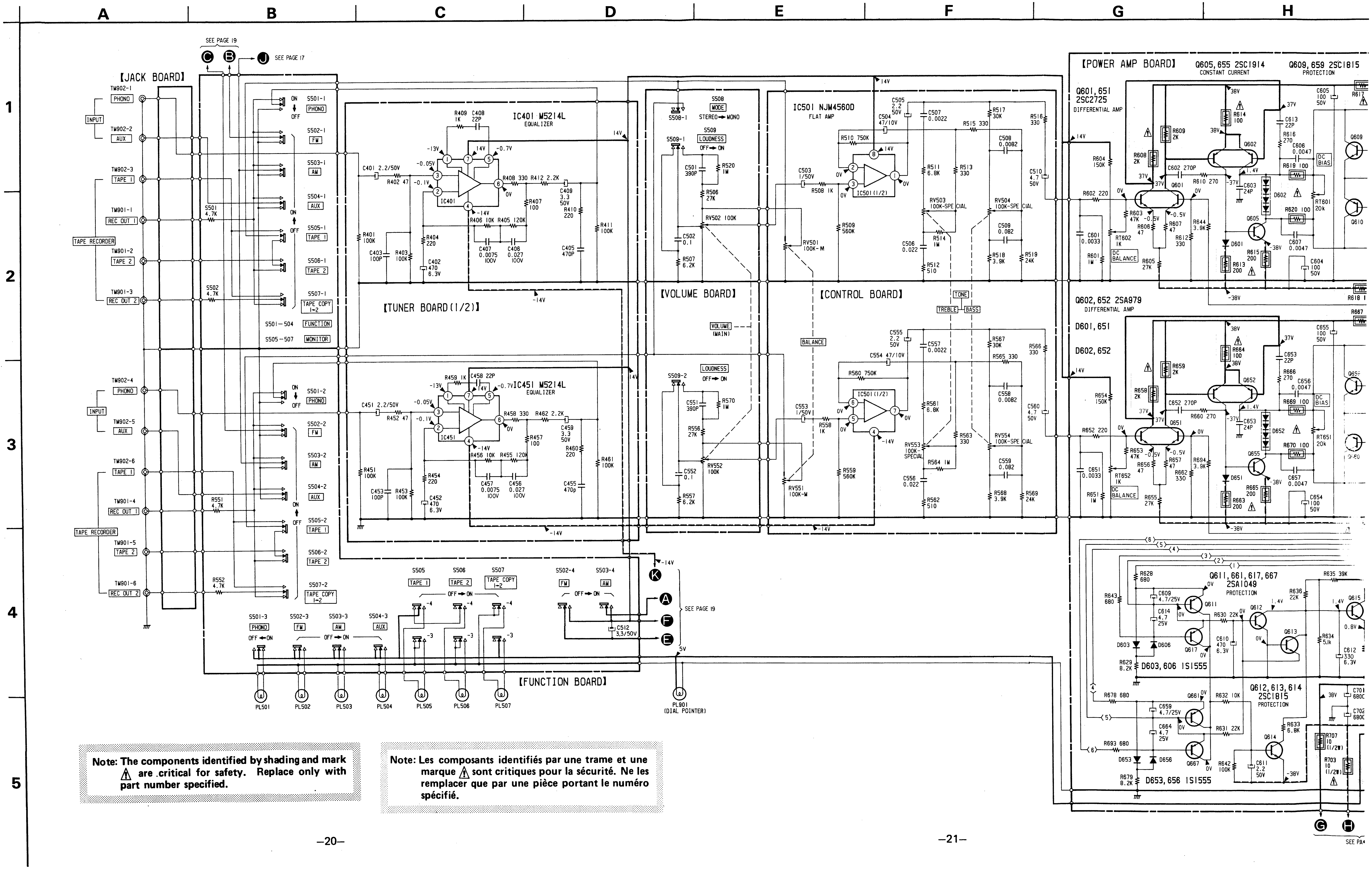

A
B
C
D
E
F
G
H
1
2
3
4
5
[TUNER BOARD(1/2)]
[FRONT-END]
FE801
Q1 2SK55
FM RF AMP
IC1
FM MIX/OSC
Q801,802
2SC710
FM IF AMP
IC801
μPC1167C
FM IF
D801
1S1555
IC101
μPC1161C
FM MPX
TM1
ANTENNA
FM 75Ω
FM 300Ω
AM
D804 MV-12N
D1 1S2236
SIGNAL INDICATOR LEVEL
S METER CIRCUIT
MUTE CIRCUIT
MUTE DRIVE CIRCUIT
LEVEL DET
OR CIRCUIT
0V SWITCH
QUADRATURE DET
AUDIO AMP
1ST IF AMP
2ND IF AMP
3RD IF AMP
AFC AMP
AUDIO MUTE CIRCUIT
IFT801
[VOLUME BOARD]
S508-2
MODE
MONO
STEREO
VCO
V.C.O. 76KHZ
76KHZ TO 38KHZ DIVIDER
ST-MONO SW
V.C.O. STOP SW
PREAMP
NF AMP
D102 1S1555
D101 1S1555
D805 1S1555
Q201,202 2SC1815
AM MUTING
IC201
μPC1178C
AM RF AMP/IF AMP/DET
IFT201
IFT202
L901
FERRITE-ROD ANT
OSC
MIX
IF AMP
DET
RF AMP
AGC AMP
METER DRIVE
AF AMP
D201
HZ11B2L
Q101 Q102
2SC1815 2SA1015
FM MUTING
IC802
μPC4558C
ACUTE SERVO LOCK
Q803-805
2SC1815
ACUTE SERVO LOCK
Q806,807 Q808,809
2SC1815 2SA1015
LED DRIVE
D807 1S1555
Q811 2SC1815
ACUTE SERVO LOCK
Q812
2SC710
FM MUTING LEVEL
D803
1S1555
D806
MV-12N
D802 1S1555
D103 1S1555
Q810 2SC1815
LED DRIVE
D301,302,309
ACUTE SERVO LOCK
D301,302
SLP-141B
LOCKED
FM MUTING LEVEL
SEE PAGE 20
S301
MUTING
OFF
ON
LOW
HIGH
[MUTING BOARD]

Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Note: Les composants identifiés par une trame et une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

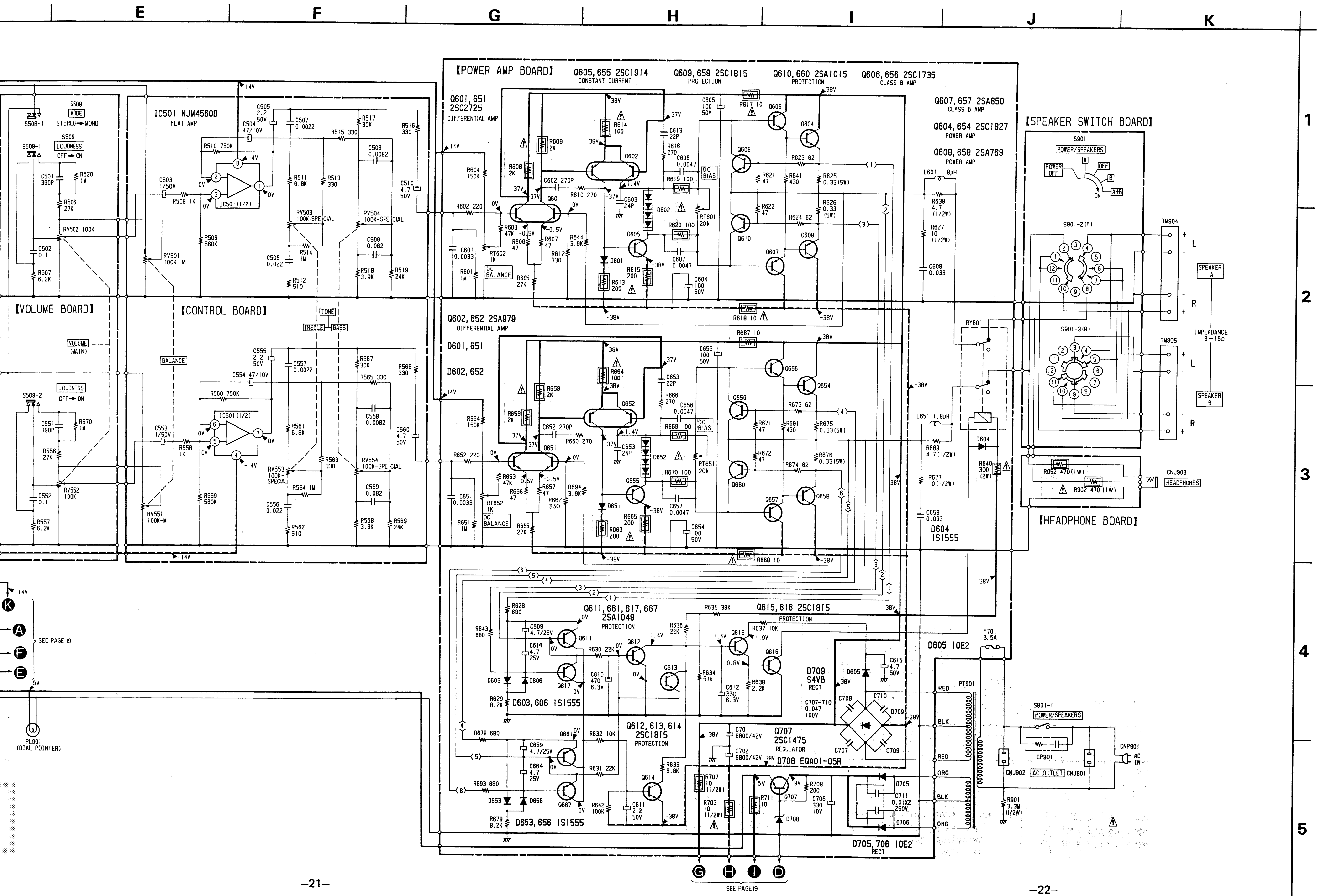

D
E
F
G
H
I
J
K
L
1
2
3
4
5
Q801,802
2SC710
FM IF AMP
IC801
μPC1167C
FM IF
D801
1S1555
IC101
μPC1161C
FM MPX
SEE PAGE 21
Q103,104
2SC1815
FM MUTING
S METER CIRCUIT
MUTE CIRCUIT
MUTE DRIVE CIRCUIT
OR CIRCUIT
0V SWITCH
LEVEL DET
QUADRATURE DET
AUDIO AMP
AFC AMP
AUDIO MUTE CIRCUIT
1ST IF AMP
2ND IF AMP
3RD IF AMP
IFT801
S508-2
MODE
MONO
STEREO
【VOLUME BOARD】
VCO
V.C.O. 76KHZ
PHASE LOCK DETECTOR
PILOT PRESENCE DETECTOR
STEREO SWITCH LAMP DRIVER
ST-MONO SW V.C.O. STOP SW
76KHZ TO 38KHZ DIVIDER
38KHZ TO 19KHZ DIVIDER
38KHZ TO 19KHZ DIVIDER
L-CH POST AMP
R-CH POST AMP
STEREO DEMODULATOR
PREAMP
NF AMP
LPF101
LPF102
SEE PAGE 20
FM STEREO SEPARATION
SEE PAGE 22
MV-12N
SIGNAL INDICATOR LEVEL
D805 1S1555
D102 1S1555
D101 1S1555
02 2SC1815
AM MUTING
Q710 2SC1826
Q703 2SC1815
DIFFERENTIAL AMP
Q101 2SC1815
Q102 2SA1015
FM MUTING
D201
HZ11B2L
IC802
μPC4558C
ACUTE SERVO LOCK
Q803-805
2SC1815
ACUTE SERVO LOCK
Q806,807 2SC1815
Q808,809 2SA1015
LED DRIVE
D308
SLP-141B
STEREO
【DISPLAY BOARD】
IC301 LB1416
SIGNAL LEVEL
D309
LOCKED
D807 1S1555
Q811 2SC1815
ACUTE SERVO LOCK
D707
EQA01-12R
FM MUTING LEVEL
Q812
2SC710
FM MUTING LEVEL
D803
1S1555
D806
MV-12N
D802 1S1555
D103 1S1555
Q810 2SC1815
LED DRIVE
D301,302,309
ACUTE SERVO LOCK
SIGNAL STRENGTH
D301,302
SLP-141B
D309
SLP-241B
D303-307
SLP-241B
Q706
2SA1015
Q704
2SB731
Q702,705
2SK34C
DIFFERENTIAL AMP
SEE PAGE 20
S301
MUTING
OFF
ON
LOW
HIGH
【MUTING BOARD】

- See page 11 for the notes.


A
B
C
D
E
F
G
H
1
2
3
4
5
SEE PAGE 19
SEE PAGE 17
[JACK BOARD]
TM902-1 PHONO
INPUT
TM902-2 AUX
TM902-3 TAPE 1
TM901-1 REC OUT 1
TAPE RECORDER
TM901-2 TAPE 2
TM901-3 REC OUT 2
TM902-4 PHONO
TM902-5 AUX
TM902-6 TAPE 1
TM901-4 REC OUT 1
TM901-5 TAPE 2
TM901-6 REC OUT 2
S501 4.7K
S502 4.7K
R551 4.7K
R552 4.7K
S501-1 PHONO
S502-1 FM
S503-1 AM
S504-1 AUX
S505-1 TAPE 1
S506-1 TAPE 2
S507-1 TAPE COPY 1-2
S501-504 FUNCTION
S505-507 MONITOR
S501-2 PHONO
S502-2 FM
S503-2 AM
S504-2 AUX
S505-2 TAPE 1
S506-2 TAPE 2
S507-2 TAPE COPY 1-2
ON
OFF
IC401 M5214L EQUALIZER
IC451 M5214L EQUALIZER
[TUNER BOARD (1/2)]
C401 2.2/50V
R402 47
R409 1K
C408 22P
R408 330
R412 2.2K
C409 3.3 50V
R410 220
R407 100
R406 10K
R405 120K
C407 0.0075 100V
C406 0.027 100V
R401 100K
C403 100P
R403 100K
R404 220
C402 470 6.3V
C405 470P
R411 100K
C451 2.2/50V
R452 47
R459 1K
C458 22P
R458 330
R462 2.2K
C459 3.3 50V
R460 220
R457 100
R456 10K
R455 120K
C457 0.0075 100V
C456 0.027 100V
R451 100K
C453 100P
R453 100K
R454 220
C452 470 6.3V
C455 470p
R461 100K
-13V
14V
-0.7V
-0.05V
-0.1V
-14V
0V
[VOLUME BOARD]
S508 MODE
STEREO→MONO
S508-1
S509 LOUDNESS
OFF→ON
S509-1
S509-2
C501 390P
R520 1M
R506 27K
RV502 100K
C502 0.1
R507 6.2K
VOLUME (MAIN)
LOUDNESS
C551 390P
R570 1M
R556 27K
RV552 100K
C552 0.1
R557 6.2K
IC501 NJM4560D FLAT AMP
[CONTROL BOARD]
C505 2.2 50V
C504 47/10V
C507 0.0022
R517 30K
R515 330
R516 330
R510 750K
C503 1/50V
R508 1K
IC501 (1/2)
R511 6.8K
R513 330
C508 0.0082
C510 4.7 50V
RV503 100K-SPECIAL
RV504 100K-SPECIAL
RV501 100K-M
R509 560K
R514 1M
C506 0.022
C509 0.082
R512 510
R518 3.9K
R519 24K
TONE
TREBLE
BASS
BALANCE
C555 2.2 50V
C554 47/10V
C557 0.0022
R567 30K
R565 330
R566 330
R560 750K
C553 1/50V
R558 1K
R561 6.8K
C558 0.0082
C560 4.7 50V
RV553 100K-SPECIAL
R563 330
RV554 100K-SPECIAL
R564 1M
RV551 100K-M
R559 560K
C556 0.022
C559 0.082
R562 510
R568 3.9K
R569 24K
[POWER AMP BOARD]
Q605, 655 2SC1914 CONSTANT CURRENT
Q609, 659 2SC1815 PROTECTION
Q601, 651 2SC2725 DIFFERENTIAL AMP
Q602, 652 2SA979 DIFFERENTIAL AMP
D601, 651
D602, 652
38V
37V
-38V
R614 100
R609 2K
R608 2K
R604 150K
R602 220
C602 270P
R610 270
C603 24P
R603 47K
R606 47
R607 47
R644 3.9K
R612 330
C601 0.0033
RT602 1K
R601 1M
DC BALANCE
R605 27K
R613 200
R615 200
C613 22P
R616 270
C606 0.0047
R619 100
DC BIAS
R620 100
RT601 20k
C607 0.0047
C604 100 50V
C605 100 50V
R617
R618
R667
Q609
Q610
R664 100
R659 2K
R658 2K
R654 150K
R652 220
C652 270P
R660 270
C653 24P
R653 47K
R656 47
R657 47
R694 3.9K
R662 330
C651 0.0033
RT652 1K
R651 1M
R655 27K
R663 200
R665 200
C653 22P
R666 270
C656 0.0047
R669 100
R670 100
RT651 20k
C657 0.0047
C654 100 50V
C655 100 50V
Q611, 661, 617, 667 2SA1049 PROTECTION
Q612, 613, 614 2SC1815 PROTECTION
D603, 606 1S1555
D653, 656 1S1555
R628 680
R643 680
C609 4.7/25V
C614 4.7 25V
R630 22K
C610 470 6.3V
R636 22K
R635 39K
R634 5.1k
C612 330 6.3V
R629 8.2K
R678 680
C659 4.7/25V
C664 4.7 25V
R632 10K
R631 22K
R633 6.8K
R693 680
R642 100K
C611 2.2 50V
R679 8.2K
R707 10 (1/2W)
R703 10 (1/2W)
C701 680
C702 680
S505 TAPE 1
S506 TAPE 2
S507 TAPE COPY 1-2
S502-4 FM
S503-4 AM
S501-3 PHONO
S502-3 FM
S503-3 AM
S504-3 AUX
OFF→ON
C512 3.3/50V
5V
[FUNCTION BOARD]
PL501
PL502
PL503
PL504
PL505
PL506
PL507
PL901 (DIAL POINTER)
SEE PA

Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Note: Les composants identifiés par une trame et une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

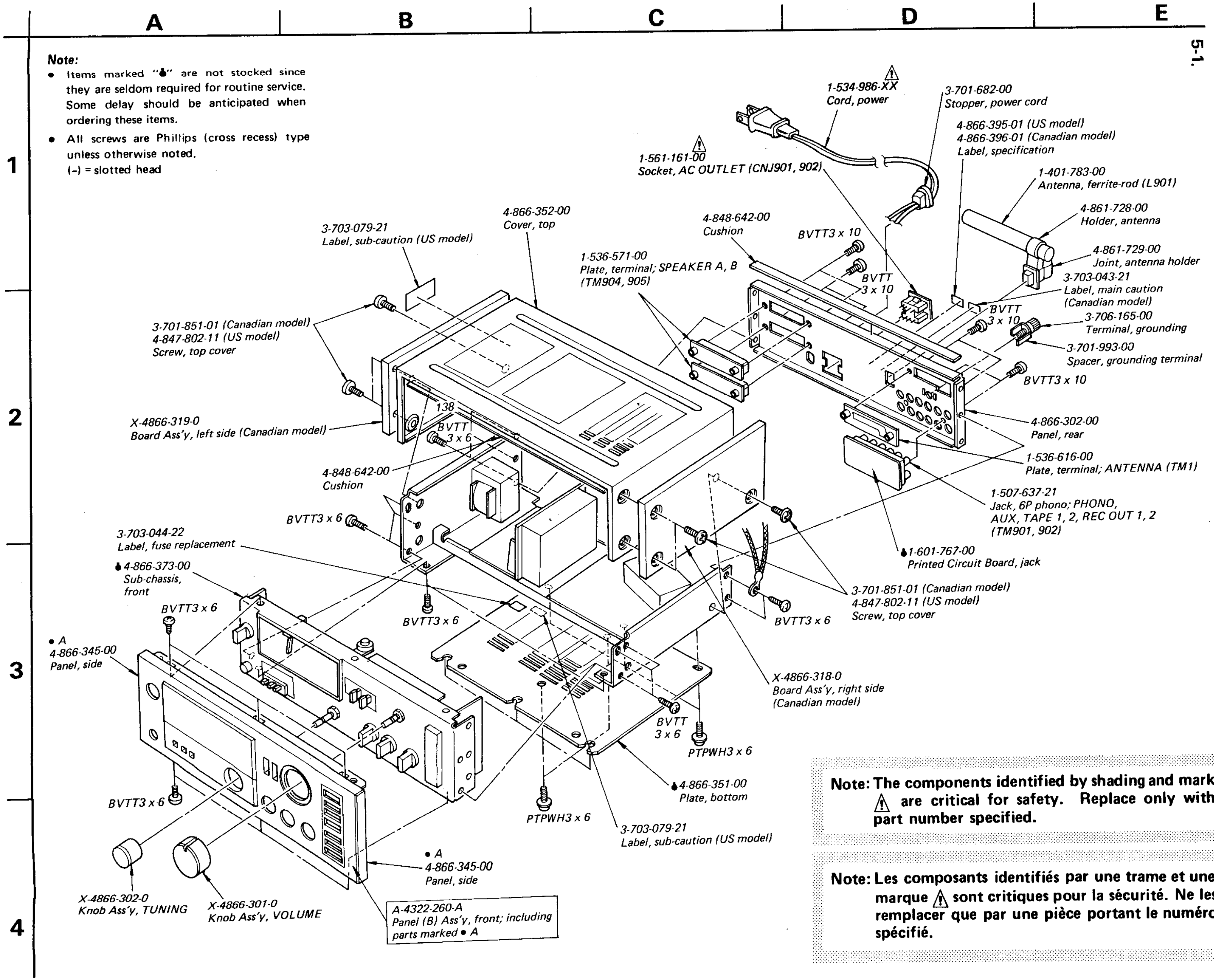

E
F
G
H
I
J
K
1
2
3
4
5
【POWER AMP BOARD】
Q605, 655 2SC1914
CONSTANT CURRENT
Q609, 659 2SC1815
PROTECTION
Q610, 660 2SA1015
PROTECTION
Q606, 656 2SC1735
CLASS B AMP
Q601, 651
2SC2725
DIFFERENTIAL AMP
Q607, 657 2SA850
CLASS B AMP
Q604, 654 2SC1827
POWER AMP
Q608, 658 2SA769
POWER AMP
Q602, 652 2SA979
DIFFERENTIAL AMP
D601, 651
D602, 652
【SPEAKER SWITCH BOARD】
S901
POWER/SPEAKERS
POWER OFF
OFF
ON
A+B
S901-2(F)
S901-3(R)
TM904
TM905
SPEAKER A
SPEAKER B
IMPEDANCE 8-16Ω
L
R
【HEADPHONE BOARD】
CNJ903
HEADPHONES
R952 470(1W)
R902 470(1W)
RY601
D604
1S1555
L601 1.8μH
L651 1.8μH
IC501 NJM4560D
FLAT AMP
IC501(1/2)
【VOLUME BOARD】
【CONTROL BOARD】
S508
MODE
S508-1
STEREO→MONO
S509
LOUDNESS
S509-1
S509-2
OFF→ON
VOLUME (MAIN)
BALANCE
TONE
TREBLE
BASS
RV501 100K-M
RV502 100K
RV503 100K-SPECIAL
RV504 100K-SPECIAL
RV551 100K-M
RV552 100K
RV553 100K-SPECIAL
RV554 100K-SPECIAL
DC BIAS
DC BALANCE
Q611, 661, 617, 667
2SA1049
PROTECTION
Q615, 616 2SC1815
PROTECTION
Q612, 613, 614
2SC1815
PROTECTION
D603, 606 1S1555
D653, 656 1S1555
D709
S4VB
RECT
D605 10E2
Q707
2SC1475
REGULATOR
D708 EQA01-05R
D705, 706 10E2
RECT
F701
3.15A
PT901
RED
BLK
ORG
S901-1
POWER/SPEAKERS
CP901
CNJ902
AC OUTLET
CNJ901
CNP901
AC IN
R901 3.3M (1/2W)
C701 6800/42V
C702 6800/42V
C707-710 0.047 100V
PL901 (DIAL POINTER)
SEE PAGE 19
K
A
F
E
G
H
I
D
SEE PAGE19
14V
-14V
37V
-37V
38V
-38V
5V
9V
0V

SECTION 5
EXPLODED VIEWS

5-1.

Note:

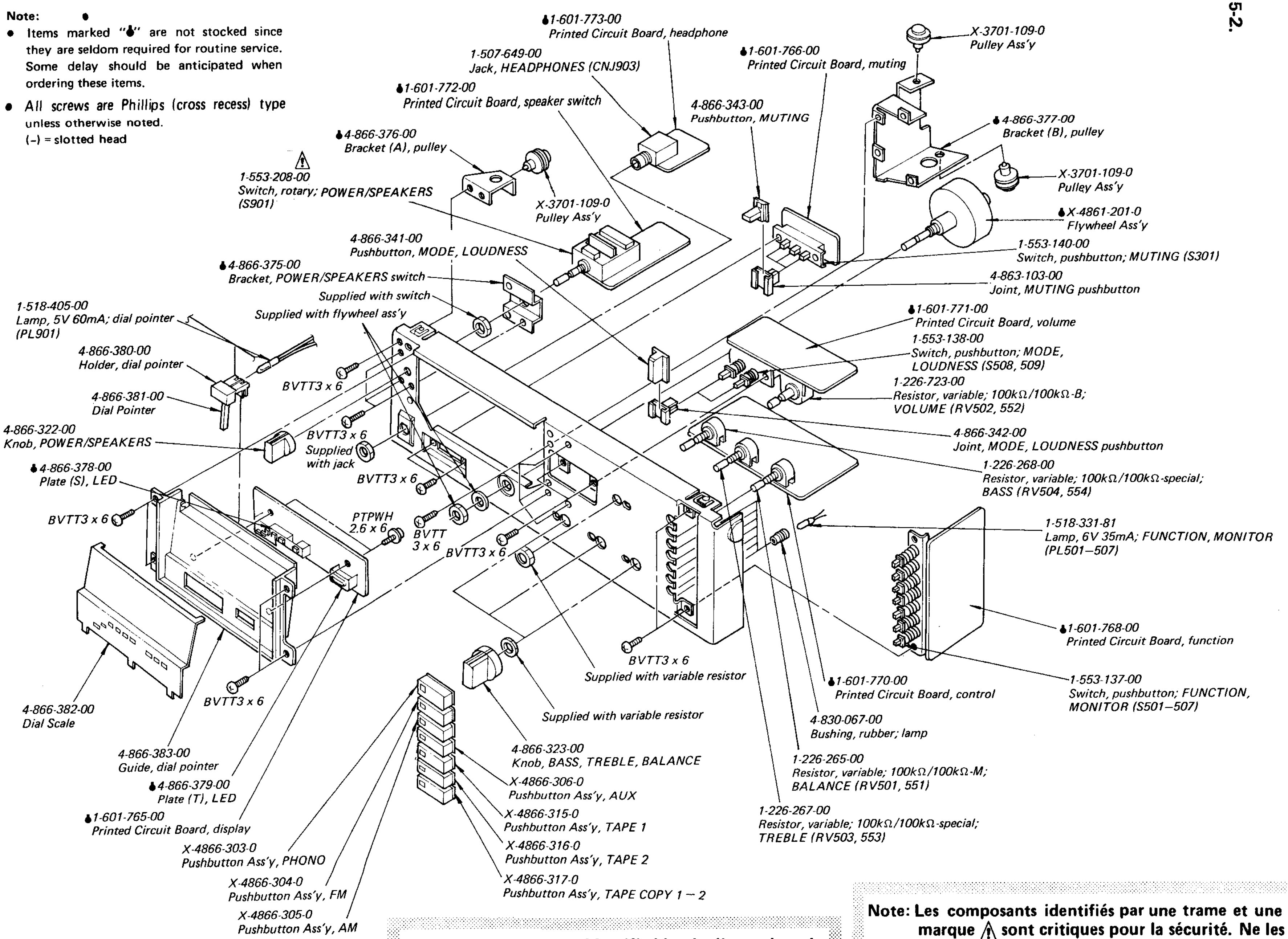
- Items marked "♠" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- All screws are Phillips (cross recess) type unless otherwise noted.
  (-) = slotted head


A
B
C
D
E
1
2
3
4
1-534-986-XX ⚠ Cord, power
3-701-682-00 Stopper, power cord
4-866-395-01 (US model)
4-866-396-01 (Canadian model)
Label, specification
1-561-161-00 ⚠ Socket, AC OUTLET (CNJ901, 902)
1-401-783-00 Antenna, ferrite-rod (L901)
4-861-728-00 Holder, antenna
4-861-729-00 Joint, antenna holder
3-703-043-21 Label, main caution (Canadian model)
3-706-165-00 Terminal, grounding
3-701-993-00 Spacer, grounding terminal
BVTT3 x 10
BVTT 3 x 10
BVTT 3 x 10
BVTT3 x 10
4-848-642-00 Cushion
4-866-352-00 Cover, top
3-703-079-21 Label, sub-caution (US model)
1-536-571-00 Plate, terminal; SPEAKER A, B (TM904, 905)
3-701-851-01 (Canadian model)
4-847-802-11 (US model)
Screw, top cover
X-4866-319-0 Board Ass'y, left side (Canadian model)
138
BVTT 3 x 6
4-848-642-00 Cushion
BVTT3 x 6
4-866-302-00 Panel, rear
1-536-616-00 Plate, terminal; ANTENNA (TM1)
1-507-637-21 Jack, 6P phono; PHONO, AUX, TAPE 1, 2, REC OUT 1, 2 (TM901, 902)
♠1-601-767-00 Printed Circuit Board, jack
3-703-044-22 Label, fuse replacement
♠4-866-373-00 Sub-chassis, front
BVTT3 x 6
BVTT3 x 6
3-701-851-01 (Canadian model)
4-847-802-11 (US model)
Screw, top cover
BVTT3 x 6
• A
4-866-345-00 Panel, side
X-4866-318-0 Board Ass'y, right side (Canadian model)
BVTT 3 x 6
PTPWH3 x 6
♠4-866-351-00 Plate, bottom
BVTT3 x 6
PTPWH3 x 6
3-703-079-21 Label, sub-caution (US model)
• A
4-866-345-00 Panel, side
X-4866-302-0 Knob Ass'y, TUNING
X-4866-301-0 Knob Ass'y, VOLUME
A-4322-260-A Panel (B) Ass'y, front; including parts marked • A

Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Note: Les composants identifiés par une trame et une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

Note:
- Items marked "♠" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- All screws are Phillips (cross recess) type unless otherwise noted.
(-) = slotted head


♠1-601-773-00
Printed Circuit Board, headphone
1-507-649-00
Jack, HEADPHONES (CNJ903)
♠1-601-766-00
Printed Circuit Board, muting
X-3701-109-0
Pulley Ass'y
♠1-601-772-00
Printed Circuit Board, speaker switch
4-866-343-00
Pushbutton, MUTING
♠4-866-377-00
Bracket (B), pulley
♠4-866-376-00
Bracket (A), pulley
⚠
1-553-208-00
Switch, rotary; POWER/SPEAKERS (S901)
X-3701-109-0
Pulley Ass'y
X-3701-109-0
Pulley Ass'y
♠X-4861-201-0
Flywheel Ass'y
4-866-341-00
Pushbutton, MODE, LOUDNESS
1-553-140-00
Switch, pushbutton; MUTING (S301)
♠4-866-375-00
Bracket, POWER/SPEAKERS switch
4-863-103-00
Joint, MUTING pushbutton
Supplied with switch
Supplied with flywheel ass'y
1-518-405-00
Lamp, 5V 60mA; dial pointer (PL901)
♠1-601-771-00
Printed Circuit Board, volume
4-866-380-00
Holder, dial pointer
1-553-138-00
Switch, pushbutton; MODE, LOUDNESS (S508, 509)
BVTT3 x 6
1-226-723-00
Resistor, variable; 100kΩ/100kΩ-B; VOLUME (RV502, 552)
4-866-381-00
Dial Pointer
4-866-322-00
Knob, POWER/SPEAKERS
BVTT3 x 6
Supplied with jack
4-866-342-00
Joint, MODE, LOUDNESS pushbutton
♠4-866-378-00
Plate (S), LED
BVTT3 x 6
1-226-268-00
Resistor, variable; 100kΩ/100kΩ-special; BASS (RV504, 554)
BVTT3 x 6
PTPWH 2.6 x 6
BVTT 3 x 6
BVTT3 x 6
1-518-331-81
Lamp, 6V 35mA; FUNCTION, MONITOR (PL501–507)
♠1-601-768-00
Printed Circuit Board, function
BVTT3 x 6
Supplied with variable resistor
♠1-601-770-00
Printed Circuit Board, control
1-553-137-00
Switch, pushbutton; FUNCTION, MONITOR (S501–507)
BVTT3 x 6
4-866-382-00
Dial Scale
Supplied with variable resistor
4-830-067-00
Bushing, rubber; lamp
4-866-383-00
Guide, dial pointer
4-866-323-00
Knob, BASS, TREBLE, BALANCE
1-226-265-00
Resistor, variable; 100kΩ/100kΩ-M; BALANCE (RV501, 551)
♠4-866-379-00
Plate (T), LED
X-4866-306-0
Pushbutton Ass'y, AUX
♠1-601-765-00
Printed Circuit Board, display
X-4866-315-0
Pushbutton Ass'y, TAPE 1
1-226-267-00
Resistor, variable; 100kΩ/100kΩ-special; TREBLE (RV503, 553)
X-4866-303-0
Pushbutton Ass'y, PHONO
X-4866-316-0
Pushbutton Ass'y, TAPE 2
X-4866-304-0
Pushbutton Ass'y, FM
X-4866-317-0
Pushbutton Ass'y, TAPE COPY 1 – 2
X-4866-305-0
Pushbutton Ass'y, AM

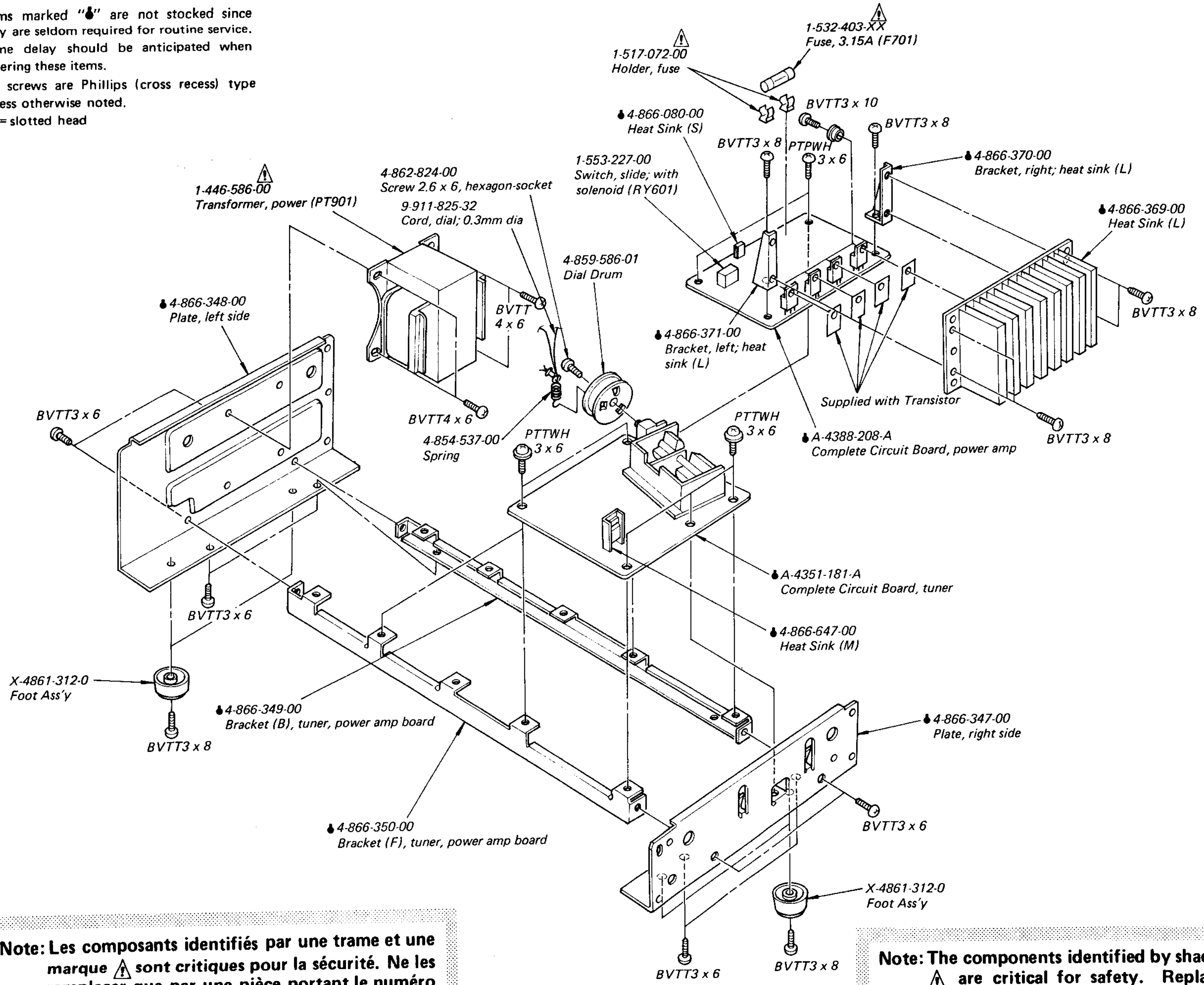
Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Note: Les composants identifiés par une trame et une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

]

Note:

- Items marked "♦" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- All screws are Phillips (cross recess) type unless otherwise noted.
  (-) = slotted head


⚠ 1-532-403-XX Fuse, 3.15A (F701)
⚠ 1-517-072-00 Holder, fuse
BVTT3 x 10
BVTT3 x 8
♦4-866-080-00 Heat Sink (S)
BVTT3 x 8
PTPWH 3 x 6
1-553-227-00 Switch, slide; with solenoid (RY601)
♦4-866-370-00 Bracket, right; heat sink (L)
♦4-866-369-00 Heat Sink (L)
⚠ 1-446-586-00 Transformer, power (PT901)
4-862-824-00 Screw 2.6 x 6, hexagon-socket
9-911-825-32 Cord, dial; 0.3mm dia
4-859-586-01 Dial Drum
♦4-866-348-00 Plate, left side
BVTT 4 x 6
♦4-866-371-00 Bracket, left; heat sink (L)
BVTT3 x 8
BVTT3 x 6
BVTT4 x 6
4-854-537-00 Spring
PTTWH 3 x 6
PTTWH 3 x 6
Supplied with Transistor
♦A-4388-208-A Complete Circuit Board, power amp
BVTT3 x 8
♦A-4351-181-A Complete Circuit Board, tuner
BVTT3 x 6
♦4-866-647-00 Heat Sink (M)
X-4861-312-0 Foot Ass'y
♦4-866-349-00 Bracket (B), tuner, power amp board
BVTT3 x 8
♦4-866-347-00 Plate, right side
BVTT3 x 6
♦4-866-350-00 Bracket (F), tuner, power amp board
X-4861-312-0 Foot Ass'y
BVTT3 x 6
BVTT3 x 8

Note: Les composants identifiés par une trame et une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

SECTION 6
ELECTRICAL PARTS LIST

SEMICONDUCTORS

Transistors

Ref. No.	*Part No.*	*Description*
⇒Q101	8-729-663-47	2SC1364
⇒Q102	8-729-612-77	2SA1027R
⇒Q103, 104 ⇒Q201, 202	8-729-663-47	2SC1364
Q601, 651	8-729-672-52	2SC2725
Q602, 652	8-729-697-92	2SA979
⇒Q604, 654	8-729-308-72	2SC1986D
Q605, 655	8-729-601-42	2SC1914A
Q606, 656	8-729-673-53	2SC1735
Q607, 657	8-729-685-03	2SA850
⇒Q608, 658	8-729-377-12	2SA771
⇒Q609, 659	8-729-663-47	2SC1364
⇒Q610, 660	8-729-612-77	2SA1027R
Q611, 661	8-729-204-91	2SA1049
⇒Q612–616	8-729-663-47	2SC1364
Q617, 667	8-729-204-91	2SA1049
⇒Q701	8-729-308-72	2SC1986D
⇒Q702	8-729-634-03	2SK34
⇒Q703	8-729-663-47	2SC1364
Q704	8-729-173-13	2SB731
⇒Q705	8-729-634-03	2SK34
⇒Q706	8-729-612-77	2SA1027R
Q707	8-729-180-93	2SD809
⇒Q801, 802	8-729-671-14	2SC710-14
⇒Q803–807	8-729-663-47	2SC1364
⇒Q808–810	8-729-612-77	2SA1027R
⇒Q811, 812	8-729-663-47	2SC1364

ICs

Ref. No.	*Part No.*	*Description*
IC101	8-759-111-61	µPC1161C
IC201	8-759-111-78	µPC1178C
IC301	8-759-814-16	LB1416
IC401, 451	8-759-652-14	M5214L
IC501	8-759-745-60	NJM4560D
IC801	8-759-111-67	µPC1167C
IC802	8-759-145-58	µPC4558C

Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Note: Les composants identifiés par une trame et une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

Diodes

Ref. No.	*Part No.*	*Description*
D101–103	8-719-815-55	1S1555
D201	8-819-910-15	HZ11B2L
D301, 302	8-719-900-41	SLP141B
D303–307	8-719-922-41	SLP241B
D308	8-719-900-41	SLP141B
D309	8-719-922-41	SLP241B
D601, 651	8-719-815-55	1S1555
D602, 652	8-719-300-11	SV04S
D603, 653 D604	8-719-815-55	1S1555
D605	⚠8-719-200-02	10E2
D606, 656	8-719-815-55	1S1555
D705, 706	⚠8-719-200-02	10E2
⇒D707	8-719-930-12	EQB01-12Z
⇒D708	8-719-931-05	EQB01-05
⇒D709	⚠8-719-504-40	S4VB40
D801–803	8-719-815-55	1S1555
D804	8-719-912-00	MV12N
D805	8-719-815-55	1S1555
D806	8-719-912-00	MV12N
D807	8-719-815-55	1S1555

CAPACITORS

Common capacitors are omitted. Refer to the lists on pages 29 and 30 for their part numbers. pF : µµF

Ref. No.	*Part No.*	*Description*		
C111	1-131-453-00	0.22µF	16V	tantalum
C201, 202	1-161-494-00	0.022µF	25V	ceramic
C203	1-161-282-00	18pF	50V	ceramic
C211	1-161-255-00	4.7pF	50V	ceramic
C212	1-161-494-00	0.022µF	25V	ceramic
C405, 455	1-161-319-00	470pF	50V	ceramic
C406, 456	1-130-307-00	0.027µF	100V	polyethylene
C407, 457	1-130-294-00	0.0075µF	100V	polyethylene
C501, 551	1-102-113-00	390pF	50V	ceramic
C615	⚠1-123-182-00	4.7µF	50V	electrolytic
C701, 702	1-125-157-00	6800µF	42V	electrolytic
C707–710	⚠1-108-385-00	0.047µF	100V	mylar
C711	⚠1-102-394-00	(0.01µF	250V) x 2	ceramic
C801, 804 C805, 806 C811, 812	1-161-494-00	0.022µF	25V	ceramic
C815	1-161-265-00	33pF	50V	ceramic
C816, 818 C819	1-161-494-00	0.022µF	25V	ceramic

⇒: Due to standardization, interchangeable replacements may be substituted for parts specified in the diagrams.

- Items marked "♦" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

RESISTORS

All resistors are in ohms. Common ¼W carbon resistors are omitted.
Refer to the list on page 28 for their part numbers.
kΩ : 1000Ω, MΩ : 1000kΩ
All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

Ref. No.	*Part No.*	*Description*		
R201	1-244-891-00	5.6k	½W	carbon
R608,658 R609,659	⚠1-247-138-00	2k	¼W	carbon (nonflammable)
R613,663	⚠1-247-114-00	200	¼W	carbon (nonflammable)
R614,664	⚠1-247-107-00	100	¼W	carbon (nonflammable)
R615,665	⚠1-247-114-00	200	¼W	carbon (nonflammable)
R617,667 R618,668	⚠1-247-083-00	10	¼W	carbon (nonflammable)
R619,669 R620,670	⚠1-247-107-00	100	¼W	carbon (nonflammable)
R625,675 R626,676	1-217-157-00	0.33	5W	metal plate
R627,677	1-244-825-00	10	½W	carbon
R639,689	1-244-817-00	4.7	½W	carbon
R640	⚠1-206-651-00	300	2W	metal oxide (nonflammable)
R703,707	⚠1-247-192-00	10	½W	carbon (nonflammable)
R710	⚠1-206-527-00	47	3W	metal oxide (nonflammable)
R711	⚠1-247-083-00	10	¼W	carbon (nonflammable)
R712	1-244-855-00	180	½W	carbon
R901	⚠1-202-725-00	3.3M	½W	composition
R902, 952	⚠1-213-139-00	470	1W	metal oxide (nonflammable)
RT101	1-226-235-00	5k, adjustable; VCO		
RT102	1-226-241-00	500k, adjustable; FM stereo separation		
RT601, 651	1-226-237-00	20k, adjustable; DC bias		
RT602, 652	1-226-233-00	1k, adjustable; DC balance		
RT801	1-226-236-00	10k, adjustable; FM muting level		

Ref. No.	*Part No.*	*Description*
RT802	1-226-238-00	50k, adjustable; signal indicator level
RV501, 551	1-226-265-00	100k/100k-M, variable; BALANCE
RV502, 552	1-226-723-00	100k/100k, variable; VOLUME
RV503, 553	1-226-267-00	100k/100k-special, variable; TREBLE
RV504, 554	1-226-268-00	100k/100k-special, variable; BASS

MISCELLANEOUS

Ref. No.	*Part No.*	*Description*
CF801, 802	1-527-307-XX	Filter, ceramic
CNJ901 CNJ902	⚠1-561-161-00	Socket, AC OUTLET
CNJ903	1-507-649-00	Jack, HEADPHONES
CP901	⚠1-231-326-11	Encapsulated Component (US model)
CP901	⚠1-231-341-00	Encapsulated Component (Canadian model)
F701	⚠1-532-403-XX	Fuse, 3.15A
FE801	1-463-298-00	Front-end
IFT201	1-404-254-00	AM IFT
IFT202	1-404-189-00	AM IFT
IFT801	1-404-170-00	FM IFT
L201	1-407-169-XX	Microinductor, 100μH
L202, 203	1-407-178-XX	Microinductor, 1μH
L204	1-405-864-00	Coil, AM OSC
♦L601, 651	1-420-838-00	Coil, 1.8μH
L901	1-401-783-00	Antenna, ferrite-rod
LPF101,102	1-231-224-12	Filter, low-pass
PL501–507	1-518-331-81	Lamp, 6V 35mA; FUNCTION, MONITOR
PL901	1-518-405-00	Lamp, 5V 60mA; dial pointer
PT901	⚠1-446-586-00	Transformer, power
RY601	1-553-227-00	Switch, slide; with solenoid
S301	1-553-140-00	Switch, pushbutton; MUTING
S501–507	1-553-137-00	Switch, pushbutton; FUNCTION, MONITOR
S508, 509	1-553-138-00	Switch, pushbutton; MODE, LOUDNESS
S901	⚠1-553-208-00	Switch, rotary; POWER/SPEAKERS
TM1	1-536-616-00	Plate, terminal; ANTENNA
TM901, 902	1-507-637-21	Jack, 6P phono; PHONO, AUX, TAPE 1, 2, REC OUT 1, 2
TM904, 905	1-536-571-00	Plate, terminal; SPEAKER A, B

Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Note: Les composants identifiés par une trame et une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

- Items marked "♠" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

Ref. No.	*Part No.*	*Description*
	⚠1-517-072-00	Holder, fuse
	⚠1-534-986-XX	Cord, power
	♠ 1-508-799-00	Base Post, U-type
	♠ 1-535-115-00	Terminal, 2P; with base
	♠ 1-535-116-00	Terminal, 3P; with base
	♠ 1-535-118-00	Terminal, 5P; with base
	♠ 1-535-119-00	Terminal, 6P; with base
	♠ 1-535-139-00	Base Post, 19mm
	♠ A-4351-181-A	Complete Circuit Board, tuner
	♠ A-4388-208-A	Complete Circuit Board, power amp
	♠ 1-601-765-00	Printed Circuit Board, display
	♠ 1-601-766-00	Printed Circuit Board, muting
	♠ 1-601-767-00	Printed Circuit Board, jack
	♠ 1-601-768-00	Printed Circuit Board, function
	♠ 1-601-770-00	Printed Circuit Board, control
	♠ 1-601-771-00	Printed Circuit Board, volume
	♠ 1-601-772-00	Printed Circuit Board, speaker switch
	♠ 1-601-773-00	Printed Circuit Board, headphone

ACCESSORIES AND PACKING MATERIALS

Part No.	*Description*
1-501-161-00	Antenna, feeder
3-701-630-00	Bag, plastic
3-783-077-21	Manual, instruction (US model)
3-783-077-21 3-794-666-31	Manual, instruction (Canadian model)
3-794-233-21	Sheet, consumer products (US model)
4-809-251-00	Bag, plastic; set
4-866-398-00	Cushion, upper; front
4-866-399-00	Cushion, lower; left
4-868-703-00	Carton (US model)
4-868-704-00	Carton (Canadian model)
4-868-713-00	Cushion, upper; rear
4-868-714-00	Cushion, lower; right

Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Note: Les composants identifiés par une trame et une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

1/4 WATT CARBON RESISTORS

Ω	*Part No.*	Ω	*Part No.*	Ω	*Part No.*	Ω	*Part No.*	Ω	*Part No.*	Ω	*Part No.*	Ω	*Part No.*
1.0	1-246-401-00	10	1-246-425-00	100	1-246-449-00	1.0k	1-246-473-00	10k	1-246-497-00	100k	1-246-521-00	1.0M	1-246-545-00
1.1	1-246-402-00	11	1-246-426-00	110	1-246-450-00	1.1k	1-246-474-00	11k	1-246-498-00	110k	1-246-522-00	1.1M	1-210-814-00
1.2	1-246-403-00	12	1-246-427-00	120	1-246-451-00	1.2k	1-246-475-00	12k	1-246-499-00	120k	1-246-523-00	1.2M	1-210-815-00
1.3	1-246-404-00	13	1-246-428-00	130	1-246-452-00	1.3k	1-246-576-00	13k	1-246-500-00	130k	1-246-524-00	1.3M	1-210-816-00
1.5	1-246-405-00	15	1-246-429-00	150	1-246-453-00	1.5k	1-246-577-00	15k	1-246-501-00	150k	1-246-525-00	1.5M	1-210-817-00
1.6	1-246-406-00	16	1-246-430-00	160	1-246-454-00	1.6k	1-246-578-00	16k	1-246-502-00	160k	1-246-526-00	1.6M	1-210-818-00
1.8	1-246-407-00	18	1-246-431-00	180	1-246-455-00	1.8k	1-246-579-00	18k	1-246-503-00	180k	1-246-527-00	1.8M	1-210-819-00
2.0	1-246-408-00	20	1-246-432-00	200	1-246-456-00	2.0k	1-246-580-00	20k	1-246-504-00	200k	1-246-528-00	2.0M	1-210-820-00
2.2	1-246-409-00	22	1-246-433-00	220	1-246-457-00	2.2k	1-246-581-00	22k	1-246-505-00	220k	1-246-529-00	2.2M	1-210-821-00
2.4	1-246-410-00	24	1-246-434-00	240	1-246-458-00	2.4k	1-246-582-00	24k	1-246-506-00	240k	1-246-530-00	2.4M	1-244-754-00
2.7	1-246-411-00	27	1-246-435-00	270	1-246-459-00	2.7k	1-246-583-00	27k	1-246-507-00	270k	1-246-531-00	2.7M	1-244-755-00
3.0	1-246-412-00	30	1-246-436-00	300	1-246-460-00	3.0k	1-246-584-00	30k	1-246-508-00	300k	1-246-532-00	3.0M	1-244-756-00
3.3	1-246-413-00	33	1-246-437-00	330	1-246-461-00	3.3k	1-246-585-00	33k	1-246-509-00	330k	1-246-533-00	3.3M	1-244-757-00
3.6	1-246-414-00	36	1-246-438-00	360	1-246-462-00	3.6k	1-246-586-00	36k	1-246-510-00	360k	1-246-534-00	3.6M	1-244-758-00
3.9	1-246-415-00	39	1-246-439-00	390	1-246-463-00	3.9k	1-246-587-00	39k	1-246-511-00	390k	1-246-535-00	3.9M	1-244-759-00
4.3	1-246-416-00	43	1-246-440-00	430	1-246-464-00	4.3k	1-246-488-00	43k	1-246-512-00	430k	1-246-536-00	4.3M	1-244-760-00
4.7	1-246-417-00	47	1-246-441-00	470	1-246-465-00	4.7k	1-246-489-00	47k	1-246-513-00	470k	1-246-537-00	4.7M	1-244-761-00
5.1	1-246-418-00	51	1-246-442-00	510	1-246-466-00	5.1k	1-246-490-00	51k	1-246-514-00	510k	1-246-538-00	5.1M	1-244-762-00
5.6	1-246-419-00	56	1-246-443-00	560	1-246-467-00	5.6k	1-246-491-00	56k	1-246-515-00	560k	1-246-539-00		
6.2	1-246-420-00	62	1-246-444-00	620	1-246-468-00	6.2k	1-246-492-00	62k	1-246-516-00	620k	1-246-540-00		
6.8	1-246-421-00	68	1-246-445-00	680	1-246-469-00	6.8k	1-246-493-00	68k	1-246-517-00	680k	1-246-541-00		
7.5	1-246-422-00	75	1-246-446-00	750	1-246-470-00	7.5k	1-246-494-00	75k	1-246-518-00	750k	1-246-542-00		
8.2	1-246-423-00	82	1-246-447-00	820	1-246-471-00	8.2k	1-246-495-00	82k	1-246-519-00	820k	1-246-543-00		
9.1	1-246-424-00	91	1-246-448-00	910	1-246-472-00	9.1k	1-246-496-00	91k	1-246-520-00	910k	1-246-544-00		

ELECTROLYTIC CAPACITORS

	RATING			→: Use the high voltage rated one.		
CAP. (μF)	6.3 VOLT.	10 VOLT.	16 VOLT.	25 VOLT.	35 VOLT.	50 VOLT.
	PART No.	PART No.	PART No.	PART No.	PART No.	PART No.
0.47					→	1-121-726-00
1.0					→	1-121-391-00
2.2					→	1-121-450-00
3.3	→	→	→	1-121-392-00	→	1-121-393-00
4.7	→	→	→	1-121-395-00	→	1-121-396-00
10	→	→	1-121-651-00	1-121-398-00	→	1-121-738-00
22	→	→	1-121-479-00	1-121-480-00	1-121-662-00	1-121-152-00
33	→	→	1-121-403-00	1-121-404-00	1-121-652-00	1-121-405-00
47	→	1-121-352-00	1-121-409-00	1-121-410-00	1-121-653-00	1-121-411-00
100	→	1-121-414-00	1-121-415-00	1-121-416-00	1-121-357-00	1-121-417-00
220	1-121-419-00	1-121-420-00	1-121-421-00	1-121-422-00	1-121-261-00	1-121-423-00
330	1-121-751-00	1-121-805-00	1-121-521-00	1-121-654-00	1-121-655-00	1-121-656-00
470	1-121-424-00	1-121-425-00	1-121-426-00	1-121-733-00	1-121-361-00	1-121-810-00
1000	–	1-121-736-00	1-121-245-00	1-121-657-00	1-121-388-00	1-123-061-00
2200	1-121-658-00	1-121-659-00	1-121-660-00	1-123-067-00	1-121-984-00	–
3300	1-121-661-00	1-123-075-00	1-123-071-00	–	–	–

CAP. (μF)	100 VOLT.	160 VOLT.	250 VOLT.	350 VOLT.
	PART No.	PART No.	PART No.	PART No.
0.47	–	–	–	–
1.0	1-123-249-00	1-123-252-00	1-123-003-00	1-121-168-00
2.2	1-123-250-00	1-123-026-00	–	1-123-028-00
3.3	1-121-995-00	–	1-123-004-00	1-123-006-00
4.7	1-123-255-00	1-121-246-00	1-121-759-00	1-123-007-00
10	1-121-126-00	1-121-999-00	1-123-254-00	1-123-008-00
22	1-121-996-00	1-123-253-00	1-123-005-00	1-123-022-00
33	1-121-997-00	1-121-757-00	–	–
47	1-123-251-00	1-121-919-00	–	–
100	1-123-084-00	–	–	–

CERAMIC CAPACITORS

			RATING				
CAP. (pF)	50 VOLT.	CAP. (pF)	50 VOLT.	CAP. (pF)	50 VOLT.	CAP. (μF)	50 VOLT.
	PART No.		PART No.		PART No.		PART No.
0.5	1-101-837-00	22	1-102-959-00	150	1-101-361-00	0.001	1-102-074-00
0.75	1-101-586-00	24	1-102-960-00	160	1-101-367-00	0.0012	1-102-118-00
1.0	1-102-934-00	27	1-102-961-00	180	1-102-976-00	0.0015	1-102-119-00
1.5	1-101-576-00	30	1-102-962-00	200	1-102-977-00	0.0018	1-102-120-00
2.0	1-102-935-00	33	1-102-963-00	220	1-102-978-00	0.0022	1-102-121-00
3	1-102-936-00	36	1-102-964-00	240	1-102-979-00	0.0027	1-102-122-00
4	1-102-937-00	39	1-102-965-00	270	1-102-980-00	0.0033	1-102-123-00
5	1-102-942-00	43	1-102-966-00	300	1-102-981-00	0.0039	1-102-124-00
6	1-102-943-00	47	1-101-880-00	330	1-102-820-00	0.0047	1-102-125-00
7	1-102-944-00	51	1-101-882-00	360	1-102-821-00	0.0056	1-102-126-00
8	1-102-945-00	56	1-101-884-00	390	1-102-822-00	0.0068	1-102-127-00
9	1-102-946-00	62	1-101-886-00	430	1-102-823-00	0.0082	1-102-128-00
10	1-102-947-00	68	1-101-888-00	470	1-102-824-00	0.01	1-102-129-00
11	1-102-948-00	75	1-101-890-00	510	1-101-059-00	0.022	1-101-005-00
12	1-102-949-00	82	1-102-971-00	560	1-102-115-00	0.047	1-101-006-00
13	1-102-950-00	91	1-102-972-00	680	1-102-116-00		
15	1-102-951-00	100	1-102-973-00	820	1-102-117-00		
16	1-102-952-00	110	1-102-815-00				
18	1-102-953-00	120	1-102-816-00				
20	1-102-958-00	130	1-101-081-00				

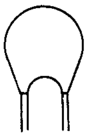
0.001μF = 1,000pF

CERAMIC (SEMICONDUCTOR) CAPACITORS

			RATING	→: Use the high voltage rated one.	
CAP. (μF)	25 VOLT.	50 VOLT.	CAP. (μF)	25 VOLT.	50 VOLT.
	PART No.	PART No.		PART No.	PART No.
0.001	→	1-161-039-00	0.018	1-161-016-00	1-161-054-00
0.0012	→	1-161-040-00	0.022	1-161-017-00	1-161-055-00
0.0015		1-161-041-00	0.027	1-161-018-00	1-161-056-00
0.0018		1-161-042-00	0.033	1-161-019-00	1-161-057-00
0.0022		1-161-043-00	0.039	1-161-010-00	1-161-058-00
0.0027	→	1-161-044-00	0.047	1-161-021-00	1-161-059-00
0.0033	→	1-161-045-00	0.056	→	1-161-060-00
0.0039	→	1-161-046-00	0.068	→	1-161-061-00
0.0047	→	1-161-047-00	0.082	1-161-024-00	1-161-062-00
0.0056	→	1-161-048-00	0.1	1-161-025-00	1-161-063-00
0.0068	→	1-161-049-00			
0.0082	1-161-012-00	1-161-050-00			
0.01	1-161-013-00	1-161-051-00			
0.012	→	1-161-052-00			
0.015	1-161-015-00	1-161-053-00			

MYLAR CAPACITORS

RATING											
CAP. (μF)	50 VOLT.	100 VOLT.	200 VOLT.	CAP. (μF)	50 VOLT.	100 VOLT.	200 VOLT.	CAP. (μF)	50 VOLT.	100 VOLT.	200 VOLT.
	PART No.	PART No.	PART No.		PART No.	PART No.	PART No.		PART No.	PART No.	PART No.
0.001	1-108-227-00	1-108-365-00	1-108-409-00	0.01	1-108-239-00	1-108-377-00	1-108-421-00	0.1	1-108-251-00	1-108-389-00	1-108-433-00
0.0012	1-108-351-00	1-108-366-00	1-108-410-00	0.012	1-108-357-00	1-108-378-00	1-108-422-00	0.12	1-108-363-00	1-108-390-00	1-108-434-00
0.0015	1-108-228-00	1-108-367-00	1-108-411-00	0.015	1-108-240-00	1-108-379-00	1-108-423-00	0.15	1-108-252-00	1-108-391-00	1-108-435-00
0.0018	1-108-352-00	1-108-368-00	1-108-412-00	0.018	1-108-358-00	1-108-380-00	1-108-424-00	0.18	1-108-364-00	1-108-392-00	1-108-436-00
0.0022	1-108-230-00	1-108-369-00	1-108-413-00	0.022	1-108-242-00	1-108-381-00	1-108-425-00	0.22	1-108-254-00	1-108-393-00	1-108-437-00
0.0027	1-108-353-00	1-108-370-00	1-108-414-00	0.027	1-108-359-00	1-108-382-00	1-108-426-00	0.27	1-108-854-00	–	–
0.0033	1-108-232-00	1-108-371-00	1-108-415-00	0.033	1-108-244-00	1-108-383-00	1-108-427-00	0.33	1-108-855-00	–	–
0.0039	1-108-354-00	1-108-372-00	1-108-416-00	0.039	1-108-360-00	1-108-384-00	1-108-428-00	0.39	1-108-856-00	–	–
0.0047	1-108-234-00	1-108-373-00	1-108-417-00	0.047	1-108-246-00	1-108-385-00	1-108-429-00	0.47	1-108-857-00	–	–
0.0056	1-108-355-00	1-108-374-00	1-108-418-00	0.056	1-108-361-00	1-108-386-00	1-108-430-00				
0.0068	1-108-237-00	1-108-375-00	1-108-419-00	0.068	1-108-249-00	1-108-387-00	1-108-431-00				
0.0082	1-108-356-00	1-108-376-00	1-108-420-00	0.082	1-108-362-00	1-108-388-00	1-108-432-00				



TANTALUM CAPACITORS

RATING →: Use the high voltage rated one.							
CAP. (μF)	3.15 VOLT.	6.3 VOLT.	10 VOLT.	16 VOLT.	20 VOLT.	25 VOLT.	35 VOLT.
	PART No.	PART No.	PART No.	PART No.	PART No.	PART No.	PART No.
0.01					→	→	1-131-396-00
0.015						→	1-131-397-00
0.022						→	1-131-398-00
0.033						→	1-131-399-00
0.047						→	1-131-400-00
0.068					→	→	1-131-401-00
0.1					→	→	1-131-402-00
0.15					→	→	1-131-403-00
0.22					→	→	1-131-404-00
0.33					→	1-131-409-00	1-131-405-00
0.47	–	–	–	–	1-131-412-00	→	1-131-406-00
0.68	–	–	–	1-131-415-00	→	1-131-410-00	1-131-407-00
1.0	–	–	1-131-418-00	–	1-131-413-00	→	1-131-408-00
1.5	–	1-131-421-00	–	1-131-416-00	→	1-131-411-00	1-131-348-00
2.2	1-131-424-00	–	1-131-419-00	–	1-131-414-00	1-131-355-00	1-131-349-00
3.3	–	1-131-422-00	–	1-131-417-00	1-131-362-00	1-131-356-00	1-131-350-00
4.7	1-131-425-00	–	1-131-420-00	1-131-369-00	1-131-363-00	1-131-357-00	1-131-351-00
6.8	–	1-131-423-00	1-131-376-00	1-131-370-00	1-131-364-00	1-131-358-00	1-131-352-00
10	1-131-426-00	1-131-383-00	1-131-377-00	1-131-371-00	1-131-365-00	1-131-359-00	1-131-353-00
15	1-131-390-00	1-131-384-00	1-131-378-00	1-131-372-00	1-131-366-00	1-131-360-00	–
22	1-131-391-00	1-131-385-00	1-131-379-00	1-131-373-00	1-131-367-00		
33	1-131-392-00	1-131-386-00	1-131-380-00	1-131-374-00			
47	1-131-393-00	1-131-387-00	1-131-381-00	–			
68	1-131-394-00	1-131-388-00	–	–			
100	1-131-395-00	–	–	–			

TANTALUM CAPACITORS

RATING						
CAP. (μF)	3 VOLT.	6.3 VOLT.	10 VOLT.	16 VOLT.	20 VOLT.	35 VOLT.
	PART No.	PART No.	PART No.	PART No.	PART No.	PART No.
0.033						1-131-273-00
0.047						1-131-274-00
0.068						1-131-275-00
0.1						1-131-276-00
0.15						1-131-277-00
0.22			–	–	1-131-262-00	1-131-278-00
0.33			–	–	1-131-263-00	1-131-279-00
0.47			1-131-169-00	–	1-131-264-00	1-131-280-00
0.68			–	1-131-258-00	1-131-265-00	1-131-281-00
1.0			1-131-254-00	–	1-131-266-00	1-131-282-00
1.5		1-131-250-00	–	–	1-131-267-00	1-131-283-00
2.2		–	–	1-131-259-00	1-131-268-00	1-131-284-00
3.3		–	1-131-255-00	–	1-131-269-00	–
4.7		1-131-251-00	1-131-171-00	–	1-131-270-00	–
6.8		–	–	1-131-260-00	1-131-271-00	–
10	–	–	1-131-256-00	–	1-131-272-00	–
15	–	1-131-252-00	–	1-131-261-00		
22	–	–	1-131-257-00	–		
33	1-131-176-00	1-131-253-00	1-131-173-00	–		
47	1-131-288-00	1-131-174-00	–	–		
100	1-131-177-00					

Sony Corporation

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